MENTAL HEALTH INTENSIVE CASE MANAGEMENT (MHICM) IN THE DEPARTMENT OF VETERANS AFFAIRS: THE SEVENTH NATIONAL PERFORMANCE MONITORING REPORT FY 2003

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Mental Health Intensive Case Management (MHICM) in the Department of Veterans Affairs: The Seventh National Performance Monitoring Report - FY 2003

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Executive Summary

This is the seventh national report on the evaluation of the Department of Veterans Affairs Mental Health Intensive Case Management (MHICM) program, previously called "Intensive Psychiatric Community Care" or "IPCC". MHICM is an innovative, experimentally validated approach to care for veterans with severe and persistent mental illness. Previous reports (Rosenheck et al., 1997; Neale et al., 1998-2003) have demonstrated that: 1) assertive community treatment is a cost-effective service for veterans with serious mental illness who are high users of VA inpatient resources; 2) MHICM benefits are maintained over the long-term (2-5 years); and 3) MHICM can be implemented and monitored in VA settings nationally. This report, which presents performance data for FY 2003 refers to early efforts and evaluations as "IPCC" and recent teams and data as "MHICM".

The MHICM Program

VHA Directive 2000-034, issued on October 2, 2000, defined "Mental Health Intensive Case Management" and identified criteria for client entry, program operation and monitoring. MHICM teams seek to deliver high quality services that: 1) provide intensive, flexible community support; 2) improve health status (reduce psychiatric symptoms & substance abuse); 3) reduce psychiatric inpatient hospital use and dependency; 4) improve community adjustment, functioning, and quality of life; 5) enhance satisfaction with services; and 6) reduce treatment costs.

Extensive literature demonstrating that assertive community treatment (ACT) or intensive case management teams can improve clinical status and reduce psychiatric hospital use for people with serious mental illness has prompted researchers, practitioners and advocates to identify ACT as an essential evidence-based practice for this population (Drake et al., 2001, Phillips et al., 2001). MHICM teams modeled on ACT provide individualized services in the community for veterans with serious mental illness. MHICM services are organized around a core set of treatment elements described in VHA Directive 2000-034: 1) Intensity of contact; 2) Flexibility and community orientation; 3) Rehabilitation focus; and 4) Continuity and responsibility.

Dissemination and Team Structure

At the end of FY 2003, 74 MHICM teams were in operation, with at least 8 more in development. VHA Directive 2000-034 specifies MHICM performance and outcome monitoring by the Northeast Program Evaluation Center (NEPEC), VA Connecticut Healthcare System. Data are presented here for 4,108 veterans who received MHICM services in FY 2003 from 63 teams with 10 or more clients that collected outcome data for the period. Of this group, 3,482 veterans (85%) had entry interview data, 2,498 (61%) had follow-up interview data, and 3,083 (75%) had clinical progress report data. Another 407 veterans entered MHICM from pre-existing case management programs, with a lower standard of client monitoring. Increases in the number of MHICM teams (+85%) and clients (+103%) over 1997 had relatively little effect on program cost per client (+8%; $6,509) or client-to-staff ratio (+0%; 12.3 per FTE) in FY 2003. At the same time, 62% of teams had fewer than 4.0 clinical FTE, the standard set forth in VHA Directive 2000-034, or had staff detailed to other services.

Client Characteristics

Overall, 90% of MHICM veterans had a diagnosis of psychotic illness at entry and had spent an average of 88 days in the hospital in the previous year. Almost half of MHICM clients (47%) had been hospitalized for *more than two years* in their lives, with over two decades of illness since their

first hospital stay. Virtually all MHICM clients (94%) received VA and/or Social Security funds for their disability. A majority (56%) received VA compensation for a service-connected disability and half (49%) had a representative payee manage their funds. Clearly, this group of veterans is dealing with long-term illness and severe disability. Client characteristics have remained fairly stable since 1997, though pre-admission hospital days have declined by 35%, following overall VA trends.

Service Delivery

Altogether 87% of MHICM veterans were seen weekly or more frequently by MHICM team staff; 61% were seen for more than one hour per week; and 89% received the majority of their care in the community. MHICM clients had an average of 70 face-to-face contacts with MHICM staff during FY 2003, or 1.4 face-to-face visits per week, per veteran. Client contacts in FY 2003 (1.35) were lower than 1997 (1.64) but comparable to FY 2002 (1.38). A total of 564 veterans (14%) were discharged from the program during the year and 106 veterans (3%) were transitioned to less intensive services after meeting criteria specified in VHA Directive 2000-034. On average, MHICM veterans had received services for 1,200 days or more than 3 years.

Outcomes

Veterans treated by MHICM teams showed average reductions in psychiatric hospital days of 33 days (72%) during their first six months in the program and proportionate reductions through 12, 18, and 24 month periods, all statistically significant. All but three teams reduced hospital use for all time periods. Outcome analyses found statistically significant improvements of 13% on clinician-rated symptoms (BPRS mean change = -5.32, $t=-15.84$, $p<0.0001$) and client-reported symptom severity scores (mean change = -0.22, $t=-15.40$, $p<0.0001$). Client-reported housing independence increased by 14% (mean change = +0.41, $t=15.43$, $p<0.0001$) and quality of life improved by 10% (mean change = +2.49, $t=17.20$, $p<0.0001$). MHICM veterans were significantly more satisfied with MHICM services relative to standard VA mental health care (+20%; mean change =+0.62, $t=22.61$, $p<0.0001$). This was reflected in higher satisfaction with overall VA mental health services at follow-up (+11%; mean change = +0.38, $t=12.10$, $p<0.0001$). FY 2003 client outcomes were improved over FY 2002 levels and consistently higher (+13 to +113%) than 1997 values.

Adherence to Model Standards

Review of team reports and outlier values supports continued monitoring of team resources and performance and attention to staff training needs. VHA Directive 2000-034 established guidelines for MHICM team operation that have been translated into a set of minimum standards and monitored to identify performance outliers. Fifteen (24%) monitored MHICM teams met all eight minimum program standards in FY 2003, up from ten (19%) in FY 2002 and 7 (15%) in FY 2001. A network planning initiative and quarterly circulation of monitoring data to network leaders, begun in FY 2001, continue to enhance the implementation of MHICM teams nationwide.

Conclusion

Development of MHICM in VHA has followed a model sequence of problem identification, program development, evaluation and dissemination (Rosenheck and Neale, 2001; Rosenheck, 2001). Careful implementation and sustained monitoring have resulted in effective community-based services for veterans with serious mental illness, a highly vulnerable population. MHICM has been successfully disseminated to more than 70 facilities and site-by-site monitoring data show it continues to provide effective and efficient services to several thousand deserving veterans in great need.

Acknowledgments

We dedicate this Seventh National Performance Monitoring Report to the hundreds of VHA **Network, Facility and Service leaders, and Central Office staff members**, who have developed and sustained community-based services over the past 17 years. Starting MHICM and other community programs has involved more than reassigning FTE from inpatient to outpatient mental health units. Often, it has meant choosing between familiar service models and new approaches, like assertive community treatment, for which the evidence base and cost benefit were not always clear and start-up challenges were significant – in the face of competing resource demands. Implementing MHICM involves hiring and training staff to provide unfamiliar services in unfamiliar locations; mobilizing new tools (vehicles, communication equipment) for work in unpredictable environments; incorporating program monitoring into service administration; and addressing stigma and poverty under real world circumstances. New teams learn different ways to work together (inter-professional teams, shared caseloads), deliver services (in vivo assessment, psychosocial rehabilitation) and engage others (veterans, family and community members, agencies) in the clients' best interest. For those who have already taken the chance, and those who contemplate doing so, we thank you for helping your staff and veterans move their feet out the door and into the real world.

This report and the successful dissemination of MHICM owe much to ongoing support from Laurent Lehmann MD, Outgoing Chief Consultant, and William Van Stone MD, Associate Chief Consultant for Psychiatry and Coordinator of SMI Veterans Programs, for the Mental Health Strategic Healthcare Group; Miklos Losonczy MD PhD and Steven Cavicchia PhD (Co-Chairs) and members of the SCMI Committee and its Consumer Council; and Paul Errera MD, who continues to advocate for community-based services for veterans with serious mental illness. Implementation of MHICM teams within VA has also benefited from efforts on behalf of assertive community treatment by individuals in the public sector, including: William Knoedler MD, Deborah Allness MSSW, Mary Ann Test PhD and the Program for Assertive Community Treatment in Madison, Wisconsin; Claudia Wink-Basing MSW, Cheri Sixbey CSW and the Assertive Community Treatment Association, Inc.; Neil Meisler MSW and Alberto Santos MD from the Medical University of South Carolina; Fred Frese PhD, Elizabeth Edgar RN, Dottie Sayer, Bonnie Banks, Jean Husted PhD, Jane Fyer and the Veterans Committee from the National Alliance for the Mentally Ill; and the Center for Mental Health Services at the Substance Abuse and Mental Health Services Administration (SAMHSA).

At NEPEC, Bernice Zigler, Donald Showalter, Dennis Thompson and particularly Alexandra Ackles have provided invaluable and creative support and helped in innumerable ways to improve our management of data for an increasingly large and complex client population. They have our sincere thanks and admiration.

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Changes in VA Mental Health Care

The closing years of the twentieth century confronted the Department of Veterans Affairs (VA) and other public mental health systems with the challenge of providing appropriate, humane and efficient care to people with serious mental illness. Despite closing 40,000 psychiatric hospital beds between 1957 and 1988, VA relied heavily on inpatient treatment through the 1990's, spending over 70% of its mental health budget on hospital care as recently as FY 1996 (Rosenheck, 1997).

In 1995, the Veterans Health Administration (VHA) began a fundamental reorganization of its structure and services in pursuit of a more comprehensive, integrated healthcare system, with enhanced priorities of customer satisfaction, cost efficiency, and accountability. Manifestations of change have included the introduction of data-based approaches to care and management, decentralization of VA administrative and budget authority to 22 veterans integrated service networks (VISNs), reallocation of healthcare resources, and a shift of focus from inpatient services to outpatient, community-based and electronic modes of care.

In mental health, organizational changes have prompted dramatic reductions in VA inpatient service use. Between Fiscal Years 1995 and 2003, lengths of stay in general psychiatry inpatient programs declined by 59% (from 32 to 13 days), and 5,948 general psychiatry beds (66% of the 1995 total) were closed. These included 1,423 (81%) long-stay beds (occupied for more than 1 year) (Greenberg and Rosenheck, 2004). Inpatient mental health care continues to account for most of VA mental health expenditures (56.3%), despite a reduction of 27.7% since 1995, and there are signs that inpatient resources may be stabilizing after years of dramatic decline. In FY 2003, only 126 general psychiatry beds (4% of the FY 2002 total), 2 of them long-stay beds, were closed. Reductions in inpatient beds have been offset, at least in part, by significant expansion of outpatient and residential rehabilitation services. Between FY 1995 and 2003, the number of veterans receiving VA outpatient mental health services increased by 243,498 (44.7%) and the number of clinical contacts per treated veteran fell from 15.1 to 12.8 (15.2%). Unadjusted for inflation, overall mental health expenditures were virtually unchanged since 1995, increasing by $23M (1.1%) and falling from 15.6% to 11.2% (-29%) as a percentage of all VA clinical costs (Rosenheck, 1996; Greenberg and Rosenheck, 2004).

The shift from inpatient to outpatient mental health care in VA would be expected to have its greatest impact on those with the most severely disabling mental illnesses, veterans who have traditionally relied on hospital treatment, especially long-term hospital treatment -- veterans who perhaps can least tolerate rapid change. People with serious mental illness are among the “least well off” (Rosenheck et al., 1998) and most vulnerable, commonly falling prey to homelessness, substance abuse, profound social isolation, and vocational dysfunction (Grob, 1994). Ethicists (Callahan, 1995; Boyle, 1995) and services researchers (Rosenheck, 1999; Schlesinger, 1995; Schlesinger and Mechanic, 1993) have emphasized that core values in our society urge us not to neglect the most vulnerable citizens, and to recognize that their vulnerability earns them special claim on public resources. Ethical and societal goals warrant careful attention to developing and monitoring quality

mental health services, particularly for the most needy veterans.

Accountability and Monitoring

VA healthcare increasingly emphasizes value, customer service, and accountability and provides specific impetus for implementation and careful monitoring of community-based care (Kizer, 1998). VA values clearly underscore the need for alternatives to inpatient hospitalization and enhanced attention to accountability and customer satisfaction. The Veterans Eligibility Reform Act of 1996 (Public Law 104-262, Section 104), furthermore, committed VA to maintain its capacity to provide specialized services for the most vulnerable veterans and mandates review of leadership reports on capacity by the VA Under Secretary for Health s Special Committee for the Care of Severely Chronically Mentally Ill Veterans (the "SMI Committee"). In 1999, the Under Secretary approved a recommendation by the SMI Committee to make intensive case management programs such as IPCC more widely available for veterans with serious mental illness (Recommendation 3, SMI Committee, 1999). In 2000, his successor issued a directive (VHA 2000-034) that defined "Mental Health Intensive Case Management" services for veterans with serious mental illnesses.

Case Management and Assertive Community Treatment (ACT)

For several decades, mental health clinicians and researchers, dismayed by the adverse consequences of precipitous State Hospital closures during the 1960's and 1970's, have sought to develop humane, health-promoting alternatives to long term hospital care for severely mentally ill persons in community settings. Case management services have emerged as a widely preferred alternative to fragmented outpatient care. In this approach, a specialist takes responsibility for facilitating access to and coordinating delivery of the full range of services needed by people with severe mental illness. General, or broker model, case management has been used for a variety of purposes ranging from cost cutting to improving clinical outcomes, and has only limited research support for its effectiveness. **Assertive community treatment** (**ACT**), a model of integrated, intensive, and comprehensive services provided by a team of skilled clinical case managers in community settings, offers a more supportive approach for individuals with serious mental illness that has been carefully developed and evaluated.

ACT was first implemented as the Program of Assertive Community Treatment (PACT) in Madison Wisconsin over 25 years ago and evaluated in a series of experimental studies (Marx et al, 1973; Stein et al., 1975; Stein and Test, 1980a, 1980b; Weisbrod et al., 1980). ACT clinicians meet their clients in the community and provide comprehensive services, including social support, skills training, and medical care, wherever and whenever they are most needed (Allness and Knoedler, 2003; Stein and Santos, 1998). A team of up to 15 case managers provides an individualized care system in the community, replacing the custodial functions of an institution with personal support and therapeutic skills training in natural settings.[1]

[1] A typical PACT team is staffed with a multi-disciplinary group of 10-15 clinicians who are configured to provide a comprehensive array of clinical and rehabilitation services every day (including evenings, weekends, holidays) and ensure 24 hour per day access for needed crisis intervention (Allness and Knoedler, 2003). A typical ACT team has 5-8 clinicians who, by necessity, provide less comprehensive services for fewer hours per week and rely on emergency/admitting staff or others to consult them about off-hour crises.

ACT Replication and Research

In the early 1980's, the success of the Madison PACT studies began to influence public policy. Wisconsin shifted inpatient treatment funds toward community-based services and Michigan funded Harbinger, the first replication of the PACT experiment (Mowbray et al., 1997; Mulder, 1985). By 1987, ACT principles had been adapted in demonstrations by numerous municipal and state mental health care systems, including Chicago, Philadelphia, Ohio, and New York (Test, 1992; Olfson, 1990; Burns and Santos, 1995; Deci et al., 1995). Replications varied with respect to the breadth and intensity of services, the accessibility and training of staff, and their effectiveness (Olfson, 1990; Stein, 1990; Deci et al., 1995; Essock and Kontos, 1995). Over the next ten years, at least 14 states developed ACT initiatives (Allness et al., 1997; Meisler, 1997). Rhode Island, Delaware and Texas established ACT as a standard "best practice" and required state-funded providers of services for the seriously mentally ill to develop ACT team services for their most troubled clients. In 1998, the Schizophrenia Patient Outcomes Research Team (PORT) highlighted ACT s effectiveness and relatively limited dissemination in its findings (Lehman et al., 1998). A year later, the National Alliance for the Mentally Ill (NAMI) made state funding for ACT services a central element of its anti-stigma advocacy campaign (NAMI, 1999). By 2003, most states reported the presence of an ACT team or active legislative/lobbying effort, with some (e.g., Florida, Illinois, Indiana, New Jersey, Virginia) funding multi-site state ACT initiatives (NAMI, 2004). Outside the United States, ACT has been adopted in Canada, Europe and around the world (Burns et al., 2001). Recent comparison of VA and non-VA treatments for schizophrenia found that VA clients were less likely to receive case management services (Rosenheck et al., 2001).

Experimental studies published over 20 years have reported that concentrating treatment resources in community-based ACT teams or intensive case management programs can result in improved clinical status of severely mentally ill patients at no additional cost (Bond et al., 1989; Hoult et al, 1984; Mulder, 1985; Stein and Test, 1980; Wasylenki et al., 1985; Weisbrod, Stein and Test, 1980). Other studies, however, have found case management to be associated with no clinical change and/or increased service utilization and cost (Bond et al., 1991; Curtis et al., 1992; Drake et al., 1998; Essock et al., 1998; Franklin et al., 1987; McFarlane et al., 1992). Literature reviews have concluded that intensive community treatment frequently reduces hospital use but does not always achieve net cost-savings or clinical improvement (Burns and Santos, 1995; Mueser, 1998; Olfson, 1992; Scott and Dixon, 1995). Most recent reviews have identified assertive community treatment as a clinically effective "evidence-based practice" when implemented correctly which can be cost-effective for clients who are high users of inpatient services (Phillips et al., 2001). A Cochrane Review concluded that ACT clients were more likely to stay in treatment and out of the hospital, to live more independently, and to be more satisfied with care than clients who received standard community or case management services (Marshall and Lockwood, 2002).

VA Demonstration: MHI, IPCC

VA initiated a demonstration program of intensive case management teams based on ACT principles at ten northeastern VA medical centers in 1987. Originally a regional demonstration (the Region 1 Mental Health Initiatives or MHI), VA s adaptation of assertive community treatment became known as Intensive Psychiatric Community Care (IPCC). A rigorous experimental study of this effort demonstrated the cost-effectiveness of this approach in VA (Rosenheck et al., 1995; Rosenheck and Neale, 1998a). IPCC, while developed for the most troubled, high hospital users, was

based on flexible operation guidelines that may be applied, with modifications, to other patient populations. Studies have shown that effective program performance requires adherence to the treatment model supported by training and performance monitoring (Rosenheck and Neale, 2001).

IPCC (MHICM) Program Objectives and Principles

IPCC (now MHICM) services are delivered by integrated, multidisciplinary teams and based on the Substance Abuse Mental Health Services Administration (SAMHSA) ACT standards. IPCC teams seek to deliver high quality services that:

- provide intensive, flexible community support;
- improve health status (reduce psychiatric symptoms & substance abuse);
- reduce psychiatric inpatient hospital use and dependency;
- improve community adjustment, functioning, and quality of life;
- enhance satisfaction with services; and
- reduce treatment costs.

To accomplish these objectives, IPCC teams adhere to four core treatment elements, most recently outlined in VHA Directive 2000-034:

- Intensity of Contact. High intensity of care primarily through home and community visits, with low caseloads (seven to fifteen veterans per clinician), allowing rapid attention to crisis and development of community living skills to prevent crisis in this exceptionally vulnerable population.

- Flexibility and Community Orientation. Flexibility and community orientation with most services provided in community settings and involving integration with natural support systems whenever possible (e.g., family members, landlords, employer).

- Rehabilitation Focus. Focus on rehabilitation through practical problem solving, crisis resolution, adaptive skill building, and transition to self-care and independent living where possible.

- Continuity and Responsibility. Identification of the team as a "fixed point of clinical responsibility" providing continuity of care for each veteran, wherever the veteran happens to be, for at least one year, with subsequent care subject to review of continuing need for intensive services.

Demonstration Findings

Analysis of data from the original multi-site MHI demonstration project yielded evidence that assertive community treatment principles could be adapted successfully within the VA healthcare system, that community-based treatment approaches could be effective in reducing hospital use and costs and improving clinical status, and that positive outcomes could be sustained or enhanced over extended time periods. Two-year demonstration findings (Rosenheck and Neale, 1998a) confirmed previous experimental research by showing significant reductions in hospital use and costs, and improvements in psychiatric status and social functioning, for veterans receiving IPCC services (Burns and Santos, 1995; Olfson, 1989; Scott and Dixon, 1995). Overall, average health care costs were $4,860 (13%) less per patient per year for those treated in IPCC. The demonstration also illustrated the value of program monitoring that addresses facility and client characteristics, administrative mission and support, and model fidelity, all of which can substantially influence program development and impact (Rosenheck and Neale, 1998b; 2001).

Program Performance Monitoring

The resource intensity of IPCC services and the program s novelty for VA have warranted collection of data on client status, service delivery and utilization, and clinical and cost outcomes, through a national monitoring and evaluation system developed and managed by VA s Northeast Program Evaluation Center (NEPEC). Integration and feedback of national data have reinforced program accountability and maintained performance standards that have been shown in the scientific literature to be essential to program effectiveness.

The 1997 IPCC Report: 1) reviewed findings from a two-year experimental design evaluation of IPCC in VA; 2) presented extended follow-up data addressing long-term clinical and cost impact on a subset of patients whose progress was followed for up to five years; 3) described a novel training and performance monitoring program developed at the Northeast Program Evaluation Center (NEPEC) for dissemination of this model; and 4) summarized initial performance data from the program s national dissemination through March 31, 1997 (Rosenheck et al., 1997). Successive reports summarized program developments and performance data for veterans treated in Fiscal years 1998 through 2001 (Neale et al., 1999-2002). The present (seventh) report summarizes performance monitors and outliers for 3,566 veterans treated by 52 teams during FY 2003.

MHICM Directive and Network Implementation Plans

On October 2, 2000, VHA Directive 2000-034 (enclosed as **Appendix A**) described a new initiative to establish **Mental Health Intensive Case Management (MHICM)** teams throughout VHA, based on the established evidence-based practice of Assertive Community Treatment (ACT) (Phillips et al, 2001). IPCC, ACT, and other intensive case management services that met standards of service intensity and access were renamed as **MHICM**. The Directive defined the target population, standards and monitoring procedures for MHICM services. Shortly thereafter, VHA headquarters initiated a process through which each VISN would submit a detailed plan evaluating the need for MHICM in their network and describing specific steps to implement appropriate services. This initiative was the result of recommendations made by the Under Secretary for Health's Special Committee on the Treatment of Severely Mentally Ill Veterans (known as the SMI Special

Committee) to assure appropriate community care would be available for veterans in the face of substantially reduced inpatient capacity. When many of the initial network plans lacked sufficient detail, the request was reissued with additional guidance and specific response templates, with responses due at the end of September 2001.

Team Development

In 1997, VA facilities and Veterans Integrated Service Networks (VISN) began to express interest in implementing MHICM teams for veterans with serious mental illness or co-occurring mental illness and substance abuse disorders. Where feasible, NEPEC staff provided assistance in the form of information, material, linkage and technical support for sites with various levels of commitment to implementation of the model. To assist local leaders with planning and decision-making about community-based intensive case management services, NEPEC developed an **Implementation Planning Packet** in 1999. The packet contained descriptive materials and literature about MHICM, a brief bibliography, an outline of minimum program standards and expectations, and implementation/fidelity checklists addressing essential elements of MHICM and assertive community treatment. It is useful for planning a new MHICM team or comparing the structure of an existing case management team to the model. An updated copy of this material, included as **Appendix B** in the MHICM report, is available with MHICM monitoring forms at NEPEC web pages on the VA intranet (*http://vaww.nepec.mentalhealth.med.va.gov*) and public internet (*http://www.nepec.org*).

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Chapter Two:
National Assessment of MHICM Program Performance

VA Implementation of IPCC/MHICM

In 1993, responding to Congressional hearings and requests to enhance the priority of care for seriously mentally ill veterans within VA, the Director of Mental Health and Behavioral Sciences Service (Paul Errera, M.D.) submitted a "National Initiative for Seriously Mentally Ill Veterans" that featured the dissemination of Intensive Psychiatric Community Care (IPCC) programs. The VA National Planning Board approved the plan and Acting Under Secretary for Health agreed to provide $1.5 million in FY 1994 and $10 million in FY 1995 to establish new IPCC programs. The initial plan included additional funds for FY 1996 and FY 1997. VA Medical Centers and freestanding Outpatient Clinics were eligible to apply for IPCC funds, involving several levels of review.

Between 1993 and 1995, IPCC teams were implemented at 30 additional sites around the country using national funds, with one quarter of available resources allocated to each of the four existing regions. On the basis of detailed implementation and outcome data from the original MHI demonstration, a standard resource package was designed to support operation of IPCC teams. This package consisted of $325,000 for 6.25 FTE; $15,000 in All Other funds; and $30,000 (10% of personnel) for medical center administrative costs, for a total of $370,000 recurring. Seventeen sites were awarded the standard package and six sites were funded at lower levels (3.5 FTE; $200,000 PS; $15,000 AO; $20,000 OH) due to lower number of eligible veterans or rural location.

In support of the national dissemination, IPCC teams at Brockton, Canandaigua, Montrose and West Haven each received 1.0 FTE to allow experienced staff to act as mentor-monitors for 6-8 new IPCC teams. Over a two-year period, mentor teams participated in various planning and training activities, including: a 2-day planning meeting; weekly conference calls; four orientation and training sessions with clusters of teams; site visits; and ongoing formal and informal communication via mail, e-mail, fax, and telephone. Staff from each new program site attended a 1 day orientation and training session with NEPEC staff, mentors, and other new programs, then accompanied mentor staff to their home facility for several days of direct observation and training. Calls were held weekly or biweekly for 6-12 months and then tapered depending upon team status. All new teams maintained formal contact with their mentors for at least one year after orientation and training.

In addition to regular contacts with new program sites, mentor-monitors reviewed each team s progress via planning conference calls with NEPEC staff and other mentor-monitors (weekly: July 1994 to June 1996; quarterly: July 1996 to September 1997). Mentors also completed implementation checklists at six months and one year, reviewing with each team details of its configuration and operation. Finally, staff from each mentor team conducted at least one site visit of a FY 1994 program after nine to twelve months of operation. Site visits enabled mentors to observe the team when it was fully operational and to help the team resolve implementation difficulties.

Recent Implementation

In 1997, as VHA decentralized management and resources, individual facilities and Veterans Integrated Service Networks (VISNs) began to request NEPEC consultation, training and technical assistance to implement IPCC teams. In subsequent years, teams were started with local resources in Detroit (MI), Central Iowa, Milwaukee (WI), St. Cloud (MN), Lyons (NJ) and the Rocky Mountain Network (VISN 19), and with network resources in VA Healthcare System of Ohio (VISN 10) and the South Central VA Healthcare Network (VISN 16). Many other sites requested information and consultation, and some facilities implemented case management teams that varied in structure and intensity of services without NEPEC assistance. VHA Directive 2000-034 prompted additional requests for consultation and training, and a network planning process described in Chapter One. To meet the training needs of new teams, NEPEC staff routinely request that network leaders provide support for team participation in face-to-face orientation and training, mentoring by a successful team and attendance at annual meetings of the Assertive Community Treatment Association (ACTA) or United States Psychiatric Rehabilitation Association (USPRA, formerly IAPSRS),

Monitoring of the IPCC team at the Bronx was discontinued in 2000 after consultation revealed the program no longer operated within MHICM standards. Members of the Bronx IPCC team were reassigned to more traditional clinical and case management services. IPCC teams at Mountain Home, Salisbury and Spokane were merged with other programs, substantially reducing staff resources and caseloads and affecting program fidelity and outcomes. More recent efforts to rejuvenate clinical operations by the Salisbury team have been successful.

MHICM National Program Monitoring

National monitoring of MHICM program performance, specified in VHA Directive 2000-034, relies on: client interviews, clinician and team progress reports, and centralized VA databases. Sources of data include: (1) Monthly FTE / Caseload reports monitoring program productivity, workload, staff turnover, and admissions; (2) Structured clinical interviews with each veteran at entry (Initial Data Form-IDF) and (semi-) annually thereafter (Follow-up Data Form-FDF) addressing client characteristics, clinical status, functioning, and service use; (3) (Semi-)Annual clinical progress reports of IPCC services and outcomes, completed by the veteran's primary case manager; (4) VA automated inpatient and outpatient service use data; (5) Fidelity assessments of team conformity with MHICM and ACT program guidelines; and (6) Staffing and budget summaries completed for an annual site progress report. Evaluation forms have been abbreviated to reduce paperwork demands.

MHICM program evaluation and monitoring variables target four domains following the classic formulation of Donabedian (1980): 1) **Program structure**: utilization and configuration of allocated resources, and caseload levels; 2) **Client characteristics**: socio-demographic, disability level, and clinical status at entry; 3) **Program Process**: pattern of service delivery, therapeutic activities and alliance, and readmissions; and 4) **Outcomes**: client use of hospital services, symptoms, functioning, quality of life, and satisfaction with services.

The following section of the report presents data on each monitoring domain, from client interviews, clinician progress reports, and automated databases, for veterans with follow-up data between October 1, 2002 and September 30, 2003. **Table 2-1** lists 47 current MHICM program monitors, indicating for each its relevant domain and program objective, the table in which its data

are presented in this report, and whether it is a "critical" program monitor (see below). Monitoring data are summarized in 33 tables and 6 figures. **Appendix D** summarizes the source and creation of all variables included in performance monitoring tables for this report. All MHICM teams participate in national performance monitoring, including the use of specific DSS identifiers (552, 546, 567) for clinical workload. Programs providing less intensive case management services exclusively are not monitored but workload is reported under DSS identifier 564. In FY 2001, VHA revised the Veterans Equitable Resource Allocation (VERA) reimbursement structure by adding veterans with 41 or more MHICM (552) visits in a year to those for whom networks receive higher reimbursement.

Monitoring Team Performance

Premises on Which the Monitoring System is Based. MHICM is still a relatively new clinical activity in VA, requiring considerable freedom for clinical innovation. Monitoring efforts are based on the assumption that rigid regulations or performance standards might stifle the creative evolution of the model and fail to account for local variation. At the same time, since VA and non-VA studies show that poor implementation is associated with low cost-effectiveness (Rosenheck and Neale, 1998b; Mueser et al., 1998; Phillips et al., 2001), it is important to monitor the program as completely and objectively as possible, identifying performance standards as suggested by research. Through this monitoring system we have sought to assemble a body of data that can guide national and network program developers and front line clinicians as they implement MHICM teams in the years ahead.

Critical Monitors: Statistical Norms vs. Practice Standards. Although a complete set of practice standards has not been established for this program, monitoring data allow more than a description of individual site performance and statistical norms have been computed for selected critical monitors. The distinction between statistical norms and formal practice standards is an important one. Practice standards are established by a consensus of professionals as directive guidelines for appropriate clinical practice. They codify how health care should be conducted. Statistical norms, in contrast, reflect how health care is practiced on average without specifying exactly what is or is not acceptable practice. Although some practice standards have been established for the MHICM program through VHA Directive 2000-034, many aspects of the program have yet to be quantitatively standardized. Even in these areas, however, practice variation within the MHICM program can be measured and statistical outliers can be identified. Identification of statistical outliers must not be confused with identification of practice standard violations. Statistical outliers are worthy of attention as extremes on a continuum but, without exploring specific circumstances, one cannot draw conclusions about their exact meaning for program performance at a particular site.

FY 2003 Critical Monitors. Nineteen of forty-seven current MHICM measures identified in Table 2-1 were selected as critical monitors that assess aspects of the program of special importance to fulfilling its mission.[2] Most of these monitors have clear directionality (i.e. extremely large or small values suggesting a departure from program values and goals). Again, performance monitors should not be considered in isolation as absolute indicators of the quality of care delivered at any site.

[2]Two monitors from the 1997 Report were dropped from national monitoring when the Readmission Review Form was made optional as part of paperwork reduction effective January 1, 1998. Client symptom and functioning monitors (each comprised of two measures) were separated, with no net change in monitors.

In most cases they can be used to properly identify statistical outliers, the importance of which must be determined by follow-up discussions or visits with the sites.

Identification of Statistical Outlier Sites. For each monitor, site data are presented in tabular form. At the bottom of a column, sums and averages across all veterans (ALL SITES) are presented, along with the mean and standard deviation for teams included in the table (SITE). In the original report, sites were identified as outliers on a variable if the site value was more than one standard deviation from the mean. For subsequent reports, outliers have been identified by a more complex statistical procedure involving **risk adjustment** for differences in baseline characteristics of veterans across sites as well as differences in sample size. First, simple change scores are created for each variable by subtracting Pre- (entry or baseline) values from Post- (latest follow-up) values, and computing site means. Second, baseline covariates are standardized by subtracting the overall mean from individual values and computing transformed means. Third, analyses of covariance are run for each outcome, using 13 baseline covariates and 2 time-in-program variables. Least-squares means adjusted for covariates are computed for each site and t-tests are run comparing the adjusted means from each site with the median site value. Sites that differ statistically from the median site (p value <0.05) in the undesired direction are identified in Tables 2-6 to 2-25 with a shaded value. Sites that differ significantly from the median in the **desired** direction are identified with a bold underlined value. The performance of outlier sites is significantly different from the median site after adjusting for differences in veteran characteristics at entry and duration of program involvement.

It is important to note that outliers on critical monitors are being identified on a purely statistical basis. This is a more rigorous and conservative approach that, unlike previous use of standard deviations to identify outliers, accounts for site and other differences at baseline, baseline values of the variable in question, and length of time veterans are in the program. For variables where all site values are close together, no outlier may be identified. For variables where site values are skewed, outliers may be identified in one direction but not the other. For variables where site values are normally distributed, a balanced number of outliers may occur in both directions.

Minimum Program Standards

VHA Directive 2000-034 establishes procedural guidelines for MHICM teams that have been operationalized in eight **minimum program standards**. These complement the critical performance monitors. Minimum standards and threshold values include:

- Percent of veterans with psychotic diagnosis at entry *(50% or more)*
- Percent of veterans with 30 or more psychiatric inpatient days in year before entry *(50% or more)*
- Mean adjusted face-to-face contacts per week/veteran *(1.0 or more)*
- Ratio of veterans to clinical FTEE (mean caseload) *(7:1 to 15:1)*
- Percent of veterans for whom at least 60% of contacts occur in community setting *(50% or more)*
- Percent of veterans receiving psychiatric rehabilitation or skills training services *(25% or more)*
- Percent of veterans discharged from MHICM program *(< 20%)*
- Number of clinical service providers on the team *(4.0+ FTEE).*

Summary of Outliers. **Table 2-27** summarizes the number of Critical Monitor outlier values

identified for each site in four major evaluation domains: program structure, client characteristics, program process and outcome. Critical Monitor outlier values are presented separately by domain in **Tables 2-28 to 2-31**. Outliers for Minimum Program Standards are presented in **Table 2-32**. Negative outlier values are outlined in summary tables. Data were made available to sites for review and discussed on national conference calls. NEPEC program assistants confer with individual sites about specific outlier variables as program evaluation and planning continue during the year.

Team Outlier Review. Prior to publication of this report, MHICM teams were asked to review draft tables and comment on critical monitors where their team value was identified as an outlier in the undesired direction. To facilitate review and comment, draft tables were posted on an intranet web site for direct access by MHICM teams. Outlier review responses are summarized in **Table 2-33**. The outlier review request and form are included in **Appendix C**.

Program Structure

MHICM Sites, Resources, and Expenditures

Sixty-three of the seventy-three MHICM teams that were in operation during FY 2003 and provided follow-up data on ten or more clients are listed in **Table 2-2**, characterized by site type and year of program start-up. Three established teams (Fort Harrison, Mountain Home, Waco) and six developing teams (Albuquerque, Fayetteville NC, Phoenix, Sheridan, Tampa, Topeka) had insufficient data to be included in this report. Local leadership discontinued a tenth program, at Spokane. The original MHI demonstration programs began in 1987. Teams at Chicago (West Side), Miami and Portland, initiated in 1992, were funded primarily by reallocating resources from three original IPCC teams that were discontinued for incomplete implementation of the program model. Dissemination sites were funded in 1994 and 1995, as part of VA s National Initiative for Veterans with Serious Mental Illness. Four orientation and training sessions were conducted with thirty dissemination sites between August 1994 and July 1995. Miami staff attended the first orientation and training session. Later teams (1998 to present) were developed from local or network initiatives.

With decentralization of VA resources to Veterans Integrated Service Networks in 1996, individual facilities and networks became the locus for funding and implementing new IPCC teams. The first locally funded and nationally monitored IPCC team was initiated by the John D. Dingle VA Medical Center in Detroit, Michigan in 1997. Additional teams were started with network resources by: Healthcare System of Ohio (VISN 10) (1998, 2001), South Central Healthcare Network (VISN 16) (2001), and Mid-Atlantic Healthcare Network (VISN 6) (2002) and with local resources by: VA Midwest Healthcare network (VISN 23) (1999, 2002), Rocky Mountain Network (VISN 19) (2000), Capitol Health Care Network (VISN 5), VA Palo Alto Healthcare System (2002), St. Louis VA Medical Center, VA Southwest Health Care Network (VISN 18) and VA Heart of Texas Health Care Network (VISN 17) (2003). In each case, the MHICM Project Director and NEPEC evaluation staff collaborated with an established MHICM ("mentor-monitor") team to provide orientation, training, and ongoing technical assistance for new team members during start-up. Mentors were assigned to observe team operation and service delivery, and consult on clinical or administrative questions. Regular conference calls were held with members of new teams to support network communication about MHICM and community service needs of veterans with serious mental illness.

VHA policy in recent years has sought to diminish historical differences between General

Medicine and Surgery (GM&S) and former Neuro-Psychiatry (NP) facilities. To illustrate the influence of facility type on the client population and therapeutic emphasis of individual MHICM teams, we continue to compare client characteristics for the two facility groups. As of 2003, the proportion of teams (22 of 63; 35%) and total veterans (1,883 of 4,108; 46%) located at NP sites has grown somewhat since the original study (30% of sites and 40% of veterans), reflecting greater numbers of veterans who meet MHICM criteria at NP sites.

Initial resource allocations to current MHICM sites are enumerated in **Table 2-3.** Resources for early teams are presented in 1988 and 1993 dollars, respectively, and exclude funds for local administrative support as none were provided until 1994. Original programs involved more diverse treatment models and staffing configurations. Initial site resources reported in annual progress reports bring the total funds for MHICM programs in the most recent fiscal year (2003) to more than $21M, with 90% of funds going to cover personnel costs, and the remainder going to All Other expenses.[3] Allocation data have become less meaningful with decentralization of healthcare funding.

MHICM program expenditures for FY 2003, derived from site-generated annual progress reports, are summarized in **Table 2-4.** These data appear to accurately reflect expenditures for program staffing and operation at most sites during that period, although it was not possible to verify program funds merged with other services in mental health service line consolidations. Program expenditures for the 63 MHICM teams included in this report totaled $26.7M during FY 2003, with $25.5M (95%) expended as Personal Service funds for 356.0 FTEE. Cost data from MHICM teams not included in this report brought the national expenditure total to almost $30M. Average costs were $424,404 per team, $71,646 per filled FTE (salary plus benefits), and $6,509 per veteran client. Unit cost data, sensitive to the proportion of new teams, are provided in Table 2-26.

Table 2-5 presents the assignment and utilization of staff resources through FY 2003. More than half (34 of 63; 54%) of teams included in this report had 4.0 or more clinical FTE providing clinical services in the community as mandated by VHA Directive 2000-034, an improvement of 17% (24 of 52) over FY 2002. Of 29 teams below the clinical FTE standard, 14 (48%) lacked 0.5 FTE, the portion of team leader time accounted for team administration. Community standards for assertive community treatment define the team leader position as equal parts clinical and administrative, to assure the leader time for direct experience with community-based service delivery and participation in administration, supervision, liaison, and personnel management on behalf of the team.

Although most MHICM positions (90%) were filled, 29 teams (46%) had vacancies of more than 6 months as of September 30, 2003, an 48% increase over FY 2002 (16 of 52, 31%). In addition, MHICM FTE from 19 teams (30%) had been detailed elsewhere without replacement for more than six months, a 43% increase over FY 2002 (11 of 52, 21%). Personnel gaps were enduring, with vacancies at eleven of sixteen teams (55%) in FY 2002, and seven of twenty teams (33%) in FY 2001, still unfilled at the end of FY 2003. Similarly, detailed FTEE at ten of eleven teams (91%) in FY 2002, and ten of twelve teams (83%) in FY 2001, were still detailed at the end of FY 2003. In sum, MHICM teams struggle to retain clinical resources even though the standard mandated by VHA

[3] In recognition of administrative costs associated with support for an IPCC team, each dissemination site received an increment of 10%, based on Personal Service dollars, for unmonitored administrative use.

Directive 2000-034 is well below that for assertive community treatment teams in other systems.

On the positive side, some MHICM teams benefited from local and network contributions of additional staff resources. Four of five staff in filled MHICM positions (294 of 356 FTEE or 83%) provided direct clinical services, primarily in community settings. This figure included 0.5 FTEE for team leaders, who were expected to provide a reduced level of community services, but excluded psychiatrists (about 12 FTE) (who generally devoted less than one day per week to MHICM veterans and rarely provided services in the community) and administrative-clerical support staff.

Caseload Levels

Clinical staffing levels and caseloads attained by each program for FY 2003 are shown in **Table 2-6.** Medical Support refers to the assignment of psychiatrists and nurses as members of the multidisciplinary team. Most teams maintained the active involvement of an assigned psychiatrist (70%) and a nurse (98%) on the team. Clinical staffing levels varied considerably across sites, from fewer than 3.0 FTE at Columbus, Milwaukee, Salisbury, Seattle, Syracuse, Togus and Washington DC to more than 9.0 FTE at Bedford, Canandaigua, Cleveland and North Chicago (including locally contributed resources). Fifty-three teams (84%) maintained caseloads within the range specified by VHA Directive 2000-034 (7 to 15 clients per clinical FTE), with ten teams (16%) **above** the specified maximum (15:1) as of September 30, 2003. This is a 45% improvement over FY 2002 (15 of 52, 29%). Several teams maintained lower caseload levels or waiting lists to preserve the intensity of their services in the face of persistently unfilled clinical positions.

Client Characteristics

Demographics and Entry Criteria

Socio-demographic characteristics for 4,083 MHICM veterans are presented in **Table 2-7,** for all sites combined (Overall) and by Site Type (GM&S, NP). Current data are comparable to original MHI study values (Rosenheck and Neale, 1998a; Rosenheck et al., 1995), with more Hispanic and African-American veterans, and fewer combat veterans, in the current group. One in five veterans (20%) reported exposure to combat. Few veterans (11.4%) reported paid employment in the three years preceding program entry. Site Type differences are less pronounced than those reported in the original multi-site study, though veterans from former Neuro-Psychiatric facilities are slightly older, more likely to be Caucasian, and less likely to have been married.

Tables 2-8 and 2-9 present Overall, Site Type, and Site data characterizing MHICM veterans at entry. Teams varied in their implementation of MHICM entry criteria. FY 2003 national MHICM program standards called for each veteran to meet the following criteria: 1) primary psychiatric diagnosis, especially a psychotic disorder; and 2) 30 or more days OR 3 or more stays of VA psychiatric inpatient hospitalization during the year preceding program entry. These criteria were selected and monitored to ensure that resource-intensive MHICM programs targeted veterans with the greatest need for intensive support and the greatest opportunity for VA cost savings. As in the original demonstration, the current overall population of MHICM veterans met target criteria defining veterans with serious mental illness who are high users of VA psychiatric resources. All program participants had a primary DSM-IV psychiatric diagnosis and 77% had been hospitalized for a month or more in the year preceding entry. One in five veterans (20%) was diagnosed with a co-

morbid substance abuse disorder. System-wide decline in length of stay has reduced the proportion of veterans meeting utilization criteria. As a result, current MHICM veterans spent an average of 88 days ("100 days) in the hospital in the year prior to entering the program, compared with 135 days {a -35% difference} for the 1997 Report (Rosenheck et al., 1997) and 144 days {-39%} for the original demonstration (Rosenheck and Neale, 1998a). Since 1997, the percentage of veterans entering the program directly from a VA psychiatric inpatient unit has fallen sharply, from 98% to 41%, and the proportion of veterans meeting the 30-day hospital use criterion has declined, from 91% to 77%.

Disability Status

Disability income data, presented by site in Table 2-9, reveal extensive VA and Social Security support for psychiatric disabilities among MHICM veterans at entry. More than half of MHICM veterans (N=1,931 of 3,482; 55.5%) reported receipt of VA compensation for a service-connected disability. Of these, 1,484 (76.9%) veterans were service-connected exclusively for a psychiatric disorder, 230 (11.9%) exclusively for a physical disability, and 217 (11.2%) for both. One in five (N=626, 18.5%) veterans reported receiving a non-service-connected disability pension. Many veterans reported receiving Social Security income (SSI: 14.9%; SSDI: 49.4%). Virtually all MHICM veterans (N=3,281; 94.2%) reported receiving some combination of VA and/or Social Security funds, and half (49.2%) said a representative payee managed their finances. Although the percentage of MHICM veterans who received VA compensation for service-connected disorders ranged from 30% to 92% across sites, the proportion of veterans receiving some form of disability support was consistently high, between 80% and 100%.

Program Adherence to Entry Criteria

Overall, MHICM teams demonstrated substantial adherence to entry criteria, presented in **Table 2-10**, despite facility differences on specific variables. Most veterans (76.6% " 21.9%) met the 30-day criterion for psychiatric hospital use in the year preceding entry. VHA service use data indicate that 83% of MHICM veterans also had 3 or more stays in the previous year. The vast majority of MHICM clients (90.2% " 7.5%) had a psychotic diagnosis (schizophrenia, schizo-affective disorder, other psychosis, bipolar disorder) at entry. One in five veterans (20.8% " 13.2%) had a secondary diagnosis of alcohol or drug abuse. Teams at Albany, Bedford and Hampton greatly exceeded the national level by targeting veterans with co-occurring diagnoses of mental illness and substance abuse. Nearly half of MHICM veterans (46.8% " 20.3%) had been hospitalized for two or more years but there was substantial site variation (range: 15.0% to 87.8%). Characteristic of typical onset of psychotic disorder in early adulthood, veterans reported histories of illness spanning more than two decades since their first hospitalization (mean = 23.2 " 2.8 years; range: 16.9 to 33.0 years).

Measures of clinical status at program entry, shown in **Table 2-11**, indicate levels of client symptoms and functional impairment commensurate with extensive hospitalization and long-term mental illness. More than half of MHICM veterans (53.6% "12.4%) reported low-level instrumental functioning on at least one activity of daily life (managing household chores, shopping, finances, medications). Despite accommodations to inpatient life by many veterans prior to entry, clinician ratings of global functioning at program entry were low (GAF mean: 39.4 " 5.5) and interviewer ratings of observed symptoms were relatively high (BPRS mean: 40.2 " 6.8), reflecting moderate psychiatric impairment. (Note: BPRS ratings were re-scored on a 1-Not Present to 7-Extremely Severe scale to conform with scoring guidelines and current reporting conventions). Fewer than half

(41.1% " 24.9%) of MHICM clients entered the program directly from an inpatient unit in FY 2003 and veterans were more likely to have been discharged or referred by an outpatient service. This extended a trend from the first report (when 98% of clients entered directly from the hospital) reflecting dramatic changes in psychiatric lengths of stay within VA since 1997.

Program Process

Program Tenure

MHICM principles emphasize continuity, frequency, intensity, and community-based services for veterans with serious and persistent mental illnesses who have not responded well to traditional modes of treatment. With respect to continuity, MHICM programs are expected to serve as a fixed point of clinical responsibility for their veterans, offering services for at least one year and providing services for as long as clinically necessary. Continuity data in **Table 2-12** indicate that MHICM programs continue to meet this expectation. A modest number (N=564, 13.5%) of MHICM clients (N=4,108) were discharged during the twelve-month report period. One hundred and five additional veterans (2.6%) were formally transitioned to less intensive services by MHICM team staff, per criteria defined by VHA Directive 2000-034. Of those for whom services were terminated, 133 (23.6%) veterans left the area and 87 (18.9%) veterans died (83 from natural causes, 4 from self-inflicted injuries). The rest of the discharged veterans asked to leave the program because they felt they no longer needed the services (N=90, 19.6%), formally graduated from the program (N=18, 4.0%), or for unspecified reasons (N=144, 31.2%). On average, veterans in the report (those with follow-up data during Fiscal Year 2003) had participated in the program for more than three years (mean=1,200 " 585 days) at the time of the latest follow-up interview.

Service Delivery and Alliance

Table 2-13 presents service delivery data provided by MHICM case managers through structured semi-annual case summaries. These data indicate MHICM has been implemented according to principles that have been shown to result in positive outcome (Rosenheck and Neale, 1998a; McGrew et al., 1994). With respect to frequency of contact, 87.3% ("10.3%) of veterans were seen weekly or more and 51.4% ("16.1%) received telephone contacts on a weekly or more frequent basis. Regarding intensity of contact, 60.8% ("17.0%) of veterans were seen for more than an hour per week in the latest six-month period (after a mean of 3+ years in the program). Pertaining to location of contact, 88.6% ("11.2%) of veterans received more than 60% of their care in the community. FY 2003 contact levels are within a percentage of FY 2002 values (Neale et al., 2003).

An important aspect of MHICM treatment involves the volume of direct, or face-to-face, contact between staff and clients, recorded as clinic stops in VA s centralized outpatient database, the National Patient Care Database (NPCD). MHICM teams record the bulk of their workload under DSS Identifiers #552 (MHICM Community Visit) and #546 (MHICM Telephone Contact). Overall, as illustrated in **Table 2-14**, each MHICM client had an average of 59 ("27.2) face-to-face visits by MHICM staff in the twelve months preceding September 30, 2003, plus 4 ("4.6) telephone contacts, for a cumulative national total of 249,776 visits. Adjusting visits to reflect the portion of the year that clients were enrolled in MHICM (mean = 84% " .10) at each site amounts to about 70 ("30.2) face-to-face visits over twelve months or 1.35 visits per week, per veteran. Including telephone contacts, each veteran received about 75 total contacts, or 1.4 contacts per week, in FY 2003. Since

each veteran can receive only one clinic stop per day for a given service, and veterans may have multiple contacts during the day, these data are likely to under-represent the actual level of MHICM contact. Overall, FY 2003 MHICM workload was marginally lower than that for FY 2002 (1.38 visits / week) and beneath program expectations of 2-3 contacts per veteran per week. Fewer teams (17 of 63; 27.0%), however, averaged less than one face-to-face contact per week (the negative outlier value) in FY 2003, a drop of 17% from FY 2002 (17 of 52; 32.7%) and 32% from FY 2001 (19 of 48; 39.6%).

Table 2-15 depicts the breadth of services provided by MHICM teams to program veterans during FY 2003. Most often, clients received supportive contact (97%), active monitoring (96%), medication management (82%), psychotherapeutic interventions (80%) and medical screening (75%). Less frequently, teams provided crisis intervention (67%), social or recreational activities (64%), housing support (51%) or rehabilitation services (48%). Substance abuse intervention (31%) was generally limited to veterans with specific needs related to dual diagnosis. Vocational support (20%) was the least used service with this severely disabled population. FY 2003 service levels increased slightly over FY 2002 values for housing support (6%) and substance abuse (+5%) services, and declined for rehabilitation (-8%) services, though teams reported difficulty defining the latter.

Clinical case management models stress the importance of the therapeutic relationship between case manager and client, based on frequent and individualized contact, for improving clinical status (Harris and Bergman, 1993; Kanter, 1989). On the basis of earlier retrospective evidence linking therapeutic alliance with MHICM outcomes (Neale and Rosenheck, 1995), case manager-client alliance was monitored at all sites using seven-item versions of the Working Alliance Inventory modified to reflect case management work (Horvath and Greenberg, 1989). **Table 2-16** compares MHICM client perceptions of their current alliance with MHICM case managers at follow-up (Alliance mean: 39.6 " 4.1) to adjusted ratings of their perceived alliance with previous inpatient / outpatient treaters, reported at entry (Alliance mean: 35.9 " 2.4). Overall, client ratings of alliance were 10% higher for MHICM staff than for previous treaters, and veterans at 55 (87%) of 63 sites reported higher levels of alliance with MHICM staff.

ACT Model Fidelity

Each MHICM team completed a measure of program fidelity to prescribed elements of assertive community treatment, the Dartmouth Assertive Community Treatment Scale (DACTS; McGrew et al., 1994; Teague et al., 1998). The measure examines team conformity with ACT program criteria pertaining to human resources, organizational boundaries, service delivery, and substance abuse treatment. Previous research has found that fidelity scores, particularly team factors, correlate strongly with reductions in hospital use (McGrew et al., 1994), and distinguish between effective and ineffective treatment teams (Teague et al., 1995). Results for MHICM programs, displayed in **Table 2-17**, show the teams performed well on three of the four domains [mean scores of 4.1 (human resources), 4.5 (organizational boundaries), and 3.9 (services)]. The fourth domain of the scale pertains to substance abuse treatment, which is not a primary emphasis of MHICM treatment, and results vary significantly by team (mean 3.0, range: 1.0-5.0). Although secondary substance abuse diagnoses are present in 20-25% of MHICM veterans at entry, most teams view a primary substance abuse diagnosis as an exclusion criterion. The overall MHICM DACTS score (mean = 4.0 " .3) approximates those for other successful public sector ACT teams (Teague et al., 1998), despite including some teams that have shifted MHICM staff to other models of care. More

than half (37 of 63, 59%) of MHICM teams achieved a score of 4.0 or more on the ACT Fidelity scale for FY 2003. [Note: VA scores include 23 of 26 original DACTS items. As a result, VA averages may be compared with non-VA programs but VA total scores are lower.]

Distance and Travel Time

For annual Clinical Progress Reports on their work with MHICM veterans, teams estimated the distance and travel time between their office and each veteran s residence. Follow-up reports indicated that most MHICM clients lived within 20 miles (N=1917, 65.8%) and 30 minutes (N=1932, 66.0%) of team offices (see **Figures 2-1 and 2-2**). At the same time, sizeable numbers of veterans lived between 21 to 40 miles (N=672, 23.1%) or 30 to 60 minutes (N=864, 29.5%) away, and some more than 40 miles (N=323, 11.1%) or 1 hour (N=132, 4.5%) away. The data suggest that MHICM teams have substantially extended access to VA mental health services for veterans with serious mental illness through their outreach activities.

Clinical Outcomes

Reduction in VA Hospital Use

A primary objective of MHICM teams is to reduce veteran reliance on psychiatric inpatient services in favor of more adaptive and less costly treatment alternatives. As evident in **Table 2-18**, this objective was well met, with all teams showing pre- to post-entry reductions in mental health hospital days after six months. Only four teams (Buffalo, Dayton, Little Rock, St. Cloud) showed any increase in hospital use after 12-, 18-, or 24-months. On average, MHICM veterans (N=3,598) reduced their VA psychiatric hospital use from 46.3 days pre-entry to 12.9 days post-entry (mean reduction = -33.4 " 26.8 days) during their first six months in the program. Overall, hospital use reductions of similar magnitude (70-73%) were observed for periods of 12 months (**Table 2-18a**: N=3,190, -54 days), 18 months (**Table 2-18b**: N=2,699, -79 days), and 24 months (**Table 2-18c**: N=2,249, -104 days).[4] About half of the teams (31 of 63; 49%) had average reductions of 30 or more days per client after one year. As in the original demonstration (Rosenheck and Neale, 1998a), NP teams continue to show greater reductions and cost savings relative to GM&S teams, although GM&S teams have been consistently effective in recent implementations. Hospital use reductions for teams at Northport, Hampton, Salem, Salisbury, Atlanta, Tuscaloosa, Northern Indiana and Tomah were diminished somewhat because some clients with few recent hospital days were "grandfathered" into MHICM from a pre-existing case management program.

One estimate of MHICM cost impact can be obtained by multiplying the mean reduction in days by the national average hospital per diem rate (FY 2003 inpatient psychiatry per diem = $893) (Greenberg and Rosenheck, 2004). This method yields estimated overall cost reductions, per client, of $29,830 at 6 months, $48,427 at 12 months, $70,528 at 18 months, and $93,202 at 24 months, unadjusted for inflation. Although some reduction in hospital use is certainly attributable to expected

[4] Paired t-tests revealed overall reductions in VA mental health hospital days to be statistically significant at 6 months (N=3,535, mean difference=-34.00, t=-37.57, p<0.0001), 12 months (N=3,129, mean difference=-55.29, t=-32.09, p<0.0001), 18 months (N=2,670, mean difference=-80.55, t=-29.69, p<0.0001), and 24 months (N=2,220, mean difference=-106.39, t=-27.19, p<0.0001).

client improvements over time and course of illness and to system-wide reductions in hospital use, present data suggest substantial cost reductions for veterans with serious mental illness who receive MHICM services.

Improvement in Clinical Status

Consistent with the MHICM mission and objectives, monitored outcomes include improvements in health status, community functioning, and quality of life, as well as customer satisfaction. Outcome measures include ratings of:

- Symptoms by clinician: Brief Psychiatric Rating Scale {BPRS}, Overall and Gorham, 1962;
- Symptoms by client: Symptom Severity {GSI}, Derogatis and Spencer, 1982);
- Global functioning by clinician: Global Assessment of Functioning {GAF}, American Psychiatric Association, 1995, Endicott et al., 1976;
- Instrumental functioning by client: Instrumental Activities of Daily Living {IADL}, Fischer et al., 1996);
- Quality of life by client: Lehman Quality of Life Inventory {QOL}, Lehman, 1988); and
- Satisfaction with VA mental health {VAMHSAT} and MHICM services {MHICM SAT} by client.

For each outcome measure, scores at program entry were compared with scores for the latest 6-month follow-up period in the report window (October 1, 2002 to September 30, 2003). Individual scores were adjusted for fifteen covariates including client characteristics, baseline values, and time in program. Median time in MHICM was 40 months. Data are presented in Tables 2-19 to 2-25.

Case manager ratings of 18 observed symptoms (BPRS) for MHICM clients, summarized in **Table 2-19,** showed an overall reduction of 12.8% from entry (N=3,460, mean sum: 40.2"6.8) to follow-up (mean sum: 34.9"11.5). Observed symptoms decreased at 48 of 63 sites (76%). Client ratings of severity for 30 symptoms on a 4-point scale (GSI: 1-not at all to 4-a great deal) (Fischer et al., 1996), in **Table 2-20**, yielded a similar overall reduction of 12.8% from entry (N=3,318, mean: 1.77"0.22) to follow-up (mean: 1.54"0.30), with lower 6-month ratings at 54 of 63 sites (86%).[5]

Reduction in Violent and Suicidal Behavior

MHICM veterans were asked whether they had thought or talked about harming someone, threatened anyone, or actually harmed anyone during their last 30 days in the community. Clients were also asked if they had been arrested or had spent a night in jail, for any reason, during the six months preceding the interview. Entry and follow-up responses are presented in **Figure 2-3**. At entry, one in five veterans (N=623, 18.4%) reported thoughts of violence, one in eight (N=445, 13.2%) talked about hurting someone, one in eleven (N=301, 8.8%) threatened someone, and one in twenty-five (N=131, 3.8%) committed a violent act. At follow-up, levels of violence were much lower across all categories, with one third fewer veterans reporting violent thoughts (N=285, 11.9%) and one half fewer veterans reporting violent talk (N=166, 6.9%), violent threats (N=104, 4.3%) or actions (N=35, 1.5%). The number of veterans reporting arrest (pre: N=320, 9.3%; post: N=68,

[5]Paired t-tests yielded significant differences reflecting improvement in both observed (N=2,215, mean difference: -5.32, t=-15.84, p<0.0001) and reported symptoms (N=2,063, mean difference: -0.22, t=-15.40, p<0.0001).

2.8%) or jail (pre: N=222, 6.4%; post: 47, 1.9%) also declined, by 70%, at follow-up.

Using similar items, MHICM veterans were asked if they had thought or talked about harming or killing themselves, threatened or attempted suicide in their last 30 days in the community, and whether a suicide attempt had resulted in hospitalization for medical reasons (see **Figure 2-4**). Though one in four veterans (N=811, 23.9%) reported thinking about suicide prior to entry, and one in eight (N=483, 14.2%) had discussed about it, less than one veteran in ten had threatened (N=261, 7.7%) or attempted (N=159, 4.7%) suicide. All veterans who attempted suicide were hospitalized for medical reasons. Among the latter group, all were hospitalized for medical reasons. At follow-up, the number of veterans in all of these categories had declined substantially, with fewer reports of suicidal thought (N=239, 10.0%), talk (N=118, 4.9%), threat (N=48, 2.0%), or attempt (N=11, 0.5%). Over a one-year period, 4 (0.1%) of the 4,108 veterans targeted in this report died from a completed suicide attempt. Another 91 veterans (2.2%) died from natural or unknown causes.

Global and Instrumental Functioning

Case manager ratings of client global functioning (GAF) are presented in **Table 2-21.** VHA adoption of the Global Assessment of Functioning as a national performance monitor for VA mental health in 1998 prompted many facilities to re-train staff in use of the measure, often resulting in a more conservative scoring range. As a result, follow-up GAF scores were lower at many sites (27 of 63 sites, 43%), particularly for established teams with earlier baseline data. Overall means were 2.6% higher at follow-up (mean: 40.3, S.D.: 9.7) than at entry (N=3,453; mean: 39.4 " 5.5), a statistically significant t-test difference (N=2,480; mean difference: 0.93, t=4.00, p<0.0001) that is comparable with the 3.5% increase after six months in the first MHICM report (Rosenheck et al., 1997).

Client ratings of performance frequency (1-almost never to 5-almost always) for twelve specific daily skills (IADL), presented in **Table 2-22**, improved slightly (+2.6%) from entry (N=2,918, mean sum: 43.8 " 3.8) to follow-up (mean sum: 44.5 " 6.1). Two out of three teams (41 of 63, 65%) showed some level of improvement at follow-up and the overall t-test difference was statistically significant (N=1,589; mean difference: 1.05, t=4.10, p<0.0001).

Enhanced Quality of Life and Independence

Client ratings on five life satisfaction items (QOL; Lehman, 1988) using a 7-point scale (1-terrible to 7-delighted), reported in **Table 2-23**, indicated improvement (9.8%) from entry (N=3,167, mean sum: 26.0 " 1.4) to follow-up (mean sum: 28.9 " 2.5). Clients from 61 of 63 teams (97%) reported higher quality of life after participation in MHICM.[6]

Veterans were asked to indicate the number of nights in their most recent month in the community that they had spent in any of five living situations: a) **independent** (alone or with spouse, family, or friend in apartment or house); b) **minimally restrictive** (supervised apartment, boarding

[6]Paired t-test results for client ratings of quality of life (N=1,962, mean difference: 2.49, t=17.2, p<0.0001), satisfaction with VA mental health services (multi-item: N=1,897, mean difference: 0.98, t=17.27, p<0.0001); single item: N=1,711, mean difference: 0.38, t=12.10, p<0.0001), and satisfaction with MHICM services (N=1,983, mean difference: 0.62, t=22.61, p<0.0001) were all significantly positive.

home, adult foster care); c) **moderately restrictive** (halfway house, treatment program, acute psychiatric diversion facility, treatment lodge, domiciliary); d) **extremely restrictive** (psychiatric hospital, skilled nursing facility, jail, or prison); or e) **homeless** (homeless or emergency shelter). In the month preceding their index hospital stay (or program entry), large groups of MHICM veterans reported living in independent (N=1,898, 53.9%), extremely restrictive (N=951, 27.8%), or minimally restrictive (N=829, 24.1%) residences (see **Figure 2-5**). Fewer veterans reported living in moderately restrictive (N=342, 10.0%) residences or having been homeless (N=137, 4.0%). At follow-up, the numbers of veterans who had been homeless (N=12, 0.5%) or in extremely restrictive residences (N=147, 6.0%) had declined by more than seventy-five percent. There was little change in the proportion of clients who reported living independently (N=1,285, 52.1%) or in moderately restrictive residence (N=202, 8.2%), but fifty-two percent more veterans reported living in minimally restrictive residences (N=899, 36.6%). At the same time, client satisfaction with living arrangements and safety increased by 8.6% and 11.3%, respectively. These data reflect the fluidity of living arrangements for veterans with serious mental illness and team reliance on boarding home, foster care and supervised apartments to complement MHICM services in off-hours.

Using the items described above, a housing independence index was created to compare veteran-reported housing status before and after program entry. Client reported days spent at each level of housing independence were multiplied by a corresponding weight (Independent x 4, Minimally restrictive x 3, Moderately restrictive x 2, Extremely restrictive x 1, Homeless x 0). Overall, a comparison of client ratings, presented in **Table 2-23a**, revealed a statistically significant 13.9% gain in housing independence from pre- (N=3,403, mean = 2.9 " 0.4) to post-entry (mean = 3.3 " 0.6) (N=2,184; mean difference: 0.41, t=15.43, p<0.0001).

Work and Rehabilitation Activity

A small number of MHICM veterans (N=397 of 3,467; 11.4%) reported full- or part-time employment in the three years before program entry. An even smaller group (N=231, 6.7%) reported paid employment in the month before program entry (see **Figure 2-6**). Among all clients, paid work days averaged 0.9 day at entry and 0.8 days at follow-up, virtually unchanged. Among paid veterans, paid days averaged 14.4 days at entry and 14.0 days at follow-up. Fewer veterans reported work as volunteers (N=149, 4.3%) or participants in “work-for-pay” (N=129, 3.7%) or formal (N=84, 2.5%) vocational rehabilitation programs at entry. At follow-up, veteran reports of paid work (N=130, 5.3%) declined, while participation in volunteer (N=120, 4.8%), “work-for-pay” (N=118, 4.8%) and formal rehabilitation (N=79, 3.4%) programs increased. The relative weakness of vocational outcomes for MHICM teams may reflect: 1) the absence of staff with vocational rehabilitation expertise on MHICM teams; 2) severe levels of impairment among MHICM veterans; and/or 3) low incentive for work among MHICM clients who receive extensive VA and Social Security benefits for disability. Anecdotally, some MHICM staff reported their clients were “too disabled” or “unmotivated” to work and were often refused admission by vocational rehabilitation services.

Satisfaction with VA Mental Health Services

Client ratings of the overall quality of VA mental health services (VAMHSAT, 3 items), presented in **Table 2-24**, showed a statistically significant 10.7% gain from pre- (N=3,125; mean: 9.4

" 0.7) to post-entry (mean: 10.3 " 0.9). Clients from 59 of 63 teams (93.7%) indicated greater satisfaction with VA mental health services at follow-up. Single-item comparison of client satisfaction with MHICM and general VA mental health services using a 5-point scale (0-very dissatisfied to 5-very satisfied), summarized in **Table 2-25**, found program participants favoring MHICM (N=3,208; mean: 3.7 " 0.4) by 20% over general services (mean: 3.1 " 0.3). All but one team showed improved satisfaction after participation in MHICM. MHICM services, comprising the bulk of psychiatric care for most program clients, were positively associated with gains in overall satisfaction with VA mental health services, up by 12.1% (mean: 3.5 " 0.9) at the time of follow-up.

Unit Costs

As its name suggests, Mental Health Intensive Case Management involves providing frequent services to veterans who are among the most seriously ill and most expensive to treat in the VA system. The extent of care required by this group, and the setting where services are delivered, have prompted low recommended client-to staff levels that, in turn, contribute most heavily to personnel and program expenses. Using FY 2003 program expenditures and data from previously presented tables, **Table 2-26** outlines rough program costs for various units of service. For 4,108 veterans in FY 2003, MHICM services cost about **$6,509 per veteran**, an increase of 16% over original study data ($5,793) adjusted for inflation (Rosenheck, Neale, and Frisman, 1995) and FY 2003 costs ($5,607). On the basis of filled positions (355.97 FTE) and FY 2003 personal service expenditures plus benefits ($26.7M), the average annual cost per position was **$71,646 per FTE** (salary plus benefits), higher than FY 2002 ($67,381). Adjusting total MHICM visits to reflect a full year of service for each veteran (a cumulative total of **288,676** visits for a year), the cost for MHICM services increased to **$93 per visit**. MHICM cost increases for FY 2003 are commensurate with rapid expansion of the program over the past two years. Teams (11, +21.2%) and FTE (72.61, +25.1%) increased more rapidly than either clients (542, +15.2%) or contacts (33,160, +13.0%), and average team caseload per clinical FTE declined (.62, 4.8%), consistent with the development of new teams that have yet to achieve full client caseloads and typical cost-benefit levels.

Outlier Review

MHICM teams were asked to review critical monitors and minimum standards where a value for their team was identified as an outlier (i.e., the team value failed to meet the minimum standard threshold, exceeded the site standard deviation in the undesired direction, or differed statistically from the median site in the undesired direction). Minimum standards were based on VHA Directive 2000-034 and critical monitor outliers were based on MHICM program guidelines and principles. For each outlier on a critical monitor or minimum standard, the team was asked to identify a reason for outlier status from among five options and to explain and address it. The Outlier Review request and review form are included in **Appendix C**.

Negative outlier values are shaded in report tables and outlined (boxed) in summary tables. Critical monitor outliers are summarized by site across monitoring domains in **Table 2-27** (Site Performance) and within domains in **Table 2-28** (Team Structure), **Table 2-29** (Client Characteristics), **Table 2-30** (Clinical Process), and **Table 2-31** (Client Outcome). Minimum standards outliers are summarized by site in **Table 2-32 A&B**. Team outlier review responses are summarized in **Table 2-33** (Outlier Review Summary) and briefly described here.

Only three teams operating in FY 2003 - Cleveland Ohio, Central Iowa (Knoxville-Des Moines) and Portland, Oregon - had no outlier values. The sixty remaining teams accounted for 163 negative outliers, 17% fewer than the 197 outliers (for 53 teams) in FY 2002. Six teams (10%) had five or more outliers, thirty percent fewer than in FY 2002 (9 teams). In order of frequency, outlier review responses from 60 teams indicated: (C) Problems in program implementation for which corrective action had been taken (Sites: 35 or 56% of responding sites; Responses: 55 or 34% of total outliers); (A) Legitimate team differences that did not conflict with national program goals (Sites: 24 or 38%; Responses: 33 or 20%); (D) Problems in program implementation for which corrective action was planned (Sites: 25 or 40%; Responses: 40 or 25%); (B) Local policies that conflicted with national program goals (Sites: 10 or 16%; Responses: 14 or 9%); and (E) Implementation problems for which no corrective action was planned (Sites: 12 or 19%; Responses: 16 or 10%).

By domain, Team Structure outliers remained the most common (88 outliers at 52 sites, 83%), followed by outliers in Clinical Process (44 outliers, 32 sites), Clinical Outcome (20 outliers, 17 sites), and Client Characteristics (11 outliers at 10 sites). By monitor, outliers were most common for Team Size and Unfilled FTE (29), Physician Support (19), Face-to-Face Contact (17), Intensity of Contact (12) and Caseload Size (10), and least likely for Psychotic Diagnosis (0), Location of Contact (1), Nursing Support (1), Quality of Life (1) and Reported Symptoms (3). Results corroborate team reports of problems maintaining staff resources to provide intensive services for veterans with serious mental illness and general adherence to ACT fidelity standards.

Adherence to Minimum Standards

VHA Directive 2000-034 established procedural guidelines for MHICM teams that were operationalized in eight **minimum program standards**. Outliers for MHICM minimum program standards (see page 16) are presented by site in Table 2-32A and B and reviewed here. Adherence was good or excellent (80% or better) for six standards and fair or poor (less than 80%) for the other two. Among standards with a higher adherence rate, all sixty-three teams (100%) reported that the majority of veterans they treated (Mean: 90%; Range: 68% to 100%) had psychiatric diagnoses that included psychosis (i.e., schizophrenia, schizo-affective or bipolar disorder, other psychosis). All teams also indicated that the majority of their clients (Mean: 89%; Range: 50% to 100%) received most MHICM clinical services in community settings. Similarly, fifty-six teams (89%) met the criterion of discharging fewer than 20 percent of their clients per year (Mean: 14%; Range: 0% to 43%). Fifty-five teams (87%) reported providing rehabilitation services (e.g., client skills training) to at least one quarter of their clients (Mean: 48%; Range: 11% to 100%). Fifty-four teams (86%) indicated that a majority of their clients (Mean: 77%; Range: 17% to 100%) had 30 or more psychiatric inpatient hospital days in the year preceding program admission. Fifty-three teams (84%) maintained client to staff ratios between 7:1 and 15:1 (Mean: 12.3; Range: 7.1 to 26.3).

Among standards with a lower adherence rate, forty-six teams (73%) had at least weekly face-to-face contact with their clients (Mean: 1.4; Range: 0.32 to 4.0). Thirty-four teams (54%) had 4 or more clinical FTEE available to provide community-based services (Mean: 4.7; Range: 2.0 to 11.5 FTEE). Non-adherence to the latter standards appeared to be largely a consequence of staff reallocation. Most of the teams that did not meet the staffing standard had been funded initially with four or more case manager positions but lost positions over the years when staff were detailed to other units, not replaced, or hiring was frozen. In many cases, staff losses coincided with higher caseloads and lower contact frequency. Fifteen of sixty-three MHICM teams (24%) met all eight

minimum program standards in FY 2003, up from 10 teams (19%) in FY 2002 and 7 teams (15%) in FY 2001.

Transition to Lower Intensity Case Management Services

VHA Directive 2000-034 (Appendix E) defined a procedure for transitioning MHICM clients to lower intensity services. Teams may begin to assess client readiness for a lower level of care, after one year of MHICM services, using five criteria: "clinically stable, not abusing addictive substances, not relying on extensive inpatient or emergency services, capable of maintaining themselves in a community living situation, and independently participating in necessary treatments". Clients who meet all criteria may be transitioned to less intensive MHICM services or to standard clinical services.

As mandated by the Directive, NEPEC began monitoring client transition to lower intensity services during FY 2000. Through FY 2002, 547 MHICM veterans were transitioned to less intensive services: 67% to lower intensity services by the MHICM team, 20% to low intensity services elsewhere, and 10% discharged without additional services. When transitioned, veterans were assessed as: clinically stable (80%); not abusing addictive substances (68%); not relying on extensive inpatient or emergency services (75%); capable of maintaining themselves in a community living situation (68%); and independently participating in necessary treatments (63%). These data indicate that up to one-third of transitioned veterans did not fully meet VHA Directive 2000-034 criteria, though the majority continued to receive low intensity services from the MHICM team. Transitioned veterans continued to receive a range of clinical services, including case management (63%), day treatment (13%), outpatient mental health therapy (47%), outpatient medication management (68%), substance abuse services (8%), residential services (24%), vocational services (10%), inpatient care (11%), or nursing home care (7%). Only 28 veterans (5%) were later restored to regular MHICM services (most re-hospitalized) because of real or imminent risk to themselves or others, impaired ability to care for self, and unwillingness or inability to participate in needed treatments. Teams reported that 14 clients (3%) may have been at greater risk due to transition to less intensive services.

At the end of FY 2003, 273 veterans (7%) were receiving low intensity case management services from 36 MHICM teams (57%). During the year, 106 MHICM veterans (3% of 4,108) were transitioned to less intensive services: 54% to lower intensity MHICM services, 29% to low intensity services elsewhere, and 11% discharged without additional services. Eleven veterans were later restored to regular MHICM services due to real or imminent risk to themselves or others. When transitioned, veterans were assessed as: clinically stable (83%); not abusing addictive substances (71%); not relying on extensive inpatient or emergency services (76%); capable of maintaining themselves in a community living situation (69%); and independently participating in necessary treatments (63%). Transitioned veterans continued to receive case management (55%), day treatment (16%), outpatient mental health therapy (75%), outpatient medication management (81%), substance abuse services (11%), residential services (33%), vocational services (13%), inpatient care (11%), or nursing home care (6%). Two clients were viewed as possibly at greater risk due to transition to less intensive services.

MHICM VERA Complex Class Status

In FY 2002, MHICM veterans became eligible for Complex Class reimbursement status under VERA (Veterans Equitable Resource Allocation) if they were registered in a MHICM program (participated in NEPEC program monitoring) and had 41 or more clinic stops (visits) under DSS Identifier 552 during the Fiscal Year. For FY 2003, average Complex Care funding under VERA was

$39,463 per veteran. FY 2003 VERA data indicate that 2,262 (55.1%) of 4,108 MHICM veterans covered by this report were included in the MHICM complex class reimbursement category. An additional 188 veterans qualified for MHICM complex class reimbursement at sites not covered by this report. **Appendix G** presents totals for MHICM complex class veterans for FY 2003 by facility.

MHICM Services for MHICM and Non-MHICM Veterans

MHICM visits are recorded in VA outpatient databases under DSS Identifier or Stop Code 552. Non-MHICM or general case management contacts (typically low intensity) are reported under identifier 564. FY 2003 workload data for MHICM veterans are summarized in **Appendix E** (see also Table 2-14) and for non-MHICM veterans in **Appendix F**. For the 63 teams covered by this report, **MHICM veterans** (N=3,971) received 233,623 regular MHICM ("high intensity") visits in FY 2003, an average of 59 visits per veteran (Appendix E). MHICM visits represented 99% of total client services for this group. A small minority of MHICM veterans (N=155 or 4%), at fifteen sites, received general case management visits (938), about 6 visits per client. A large number of **Non-MHICM veterans** (N=2,912) were credited with MHICM visits, typically at facilities with established or developing MHICM teams. Contacts for these veterans (46,875 visits) made up a smaller portion (66%%) of total case management services and averaged 16 visits per veteran. Most of these veterans were presumably seen for assessment or screening visits or clinic stop code 552 (MHICM visit) was incorrectly assigned. Only veterans who are fully enrolled or registered in the performance monitoring system are considered MHICM participants under VHA Directive 2000-034. A substantial group of non-MHICM veterans (N=2,797) received general case management services (24,350 visits), an average of 9 visits per veteran. Many of these contacts were reported by facilities without a MHICM team.

Program Performance Trends: 1997 to 2003

This is the seventh MHICM performance monitoring report, dating back to FY 1997. Beginning with this report, we will summarize trends in program performance by monitoring domain, comparing the latest results (FY 2003) with those for the first report (FY 1997) and the two most recent years (FY 2001 and 2002). These data are presented in **Appendix H**.

Data on **team structure** show a significant increase in the number of MHICM teams (+85%) and clients (+103%), as well as program expenditures (+110%) since 1997. Most of this change has come since October 2000 with implementation of VHA Directive 200-034. The number of MHICM staff positions also increased but at a lower rate (+60%). Positions remain filled at about the same level as last year (+91%). The percentage of teams with at least one team member detailed to another service has increased dramatically (+278%). The addition of a number of new teams in FY 2003 increased the cost per client (+8%) and reduced the client to staff ratio (12.3:1), temporary effects of building full team caseloads.

Client characteristics data indicate an increase in the number of veterans from minority racial/ethnic groups (+16%) since 1997. Reflecting VHA's shift toward outpatient services, client days in hospital have decreased (-35%) and the proportions of clients with 30 or more hospital days (-16%) and 2 or more years of lifetime hospitalization (-19%) have declined. The vast majority of MHICM clients continue to have a psychotic diagnosis (90%). Despite some targeting of clients with co-occurring substance use, that group has decreased somewhat (-17%) since 1997. Client

participation in paid employment prior to entry has declined (-9%) while receipt of public support income has increased (+4%).

Service delivery data provide evidence that MHICM veterans continue to be contacted weekly (+3%) if somewhat less frequently (-16%) than in 1997. FY 2003 contacts remained at the FY 2002 level. More clients receive the majority of their services in community settings (+14%) than in 1997. The number of discharges has declined recently (-14%) as veterans (currently 7%) are transitioned to less intensive services by the team. Veteran ratings of their therapeutic alliance with MHICM staff have increased (+26%) since 1997, and team fidelity to assertive community treatment principles have remained steady (4.0, 0% change).

Client outcome data show sizeable improvements in percentage reduction for both observed (+83%) and reported (+113%) symptoms at follow-up, since 1997. Quality of life ratings have improved (+22%) and satisfaction with MHICM services has remained high (+1%). Although client inpatient days prior to program entry continue to decline (–35% overall, -5% in the past year), the percentage reduction in client hospital days at follow-up has increased (+13%).

Consistent with VHA's commitment to expand access to community-based services, the MHICM program has grown since 1997. MHICM has benefited from network and facility support and a national initiative to implement VHA Directive 2000-034. Review of outliers and team reports continue to underscore the importance of attention to team and caseload size and staff training. Performance monitoring data show that MHICM teams continue to target veterans who need intensive support, providing them with quality services in community settings. After seven years of MHICM performance monitoring, client outcomes are strong and satisfaction remains high.

Summary and Conclusions:

Development of Mental Health Intensive Case Management services in VA has followed a model sequence of problem identification, program development, evaluation, and dissemination (Rosenheck, 2001). Modeled on evidence-based, "best practice" programs in widespread use elsewhere in the nation (Rosenheck and Neale, 2001; Phillips et al., 2001), the MHICM program is a well-defined intervention that meets local needs within its operational parameters. A rigorous study demonstrated the program's cost-effectiveness and long-term benefits in VA settings, as well as the need for training and monitoring to assure proper implementation. Both VA and non-VA studies show program benefits are not likely to be attained unless team operation is carefully monitored (Mueser et al., 1998). MHICM has been successfully implemented at more than 70 VA healthcare systems and site-by-site performance monitoring data show the program continues to provide effective and efficient services to deserving veterans in great need.

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Table 2-1. VA MHICM Program Monitors

Monitoring Domain	Program Monitor	Unit	Report Table^	Program Objective	Critical Monitor
I. Structure	1. Total FTE allocated to date	#	2-3	1	
	2. Actual FTEE filled (September 30, 2003)	#	2-5	1	
	3. % FTE utilized	%	2-5	1	
	4. Total funds (PS, AO, AS, TOT) allocated	$	2-3	1	
	5. Actual funds expended (FY 2003)	$	2-4	1	
	6. Medical support (.2MD, 1.0RN)	Y/N	2-6	1	*
	7. Clinical FTEE	#	2-6	1	+
	8. FTE unfilled or lagged GTE 6 months	Y/N	2-5	1	*
	9. FTE assigned to non-MHICM activities	Y/N	2-5	1	
	10. # Total veterans enrolled (9/30/03)	#	2-6	1	
	11. Caseload size (vet/staff: 7-15/Clinical FTE)	ratio	2-6	1	*+
II. Client	12. % Caseload entered as inpatient	%	2-8	1	
	13. % Caseload w/CLOS GTE 30 (yr of entry)	%	2-8/10	1	*+
	14. % Caseload w/psychotic diagnosis at entry	%	2-8/10	1	*+
	15. % Age at entry (by category)	%	2-7	na	
	16. % Minority status	%	2-7	na	
	17. % Dual diagnosis	%	2-8	na	
	18. Lifetime psych hospital use (% GT 2 yrs)	%	2-10	3	
	19. % Receiving public support (any source)	%	2-8/9	1	
	20. % Receiving VA compensation or pension	%	2-8/9	1	
	21. % Employed (FT/PT) in past 3 years	%	2-7	1	
	22. Global functioning at entry (% GAF GTE 50)	%	2-11	4	*
	23. IADL skills (% domains rarely/never)	%	2-11	4	
	24. Severity of illness (Mean BPRS score)	#	2-11	2	
III. Process	25. # New veterans added	#	2-12	1	
	26. % Clients terminated (Continuity)	%	2-12	1	*+
	27. % Clients seen weekly + (Frequency)	%	2-13	1	
	28. % Clients seen 61+mins/wk seen (Intensity)	%	2-13	1	*
	29. % Clients seen 61%+ community (Location)	%	2-13	1	*+
	30. # Face-to-face contacts/wk (Adj mean/wk)	#	2-14	1	*+~
	31. % Clients seen for rehabilitation	%	2-15	4	+
	32. % Clients seen for substance abuse	%	2-15	2	
	33. % Change therapeutic alliance	%	2-16	5	
	34. % Fidelity to ACT Model	%	2-17	1	
IV. Outcome	35. # Mean VA hospital days post-entry (6 mos)	#	2-18	3	*
	36. % Change in VA hospital days (6 mos)	%	2-18	3	
	37. $ Estimated change in VA healthcare cost	$	2-18	6	
	38. % Client symptoms improved (BPRS)	%	2-19	2	*
	39. % Client symptoms improved (BSI)	%	2-20	2	*
	40. % Client functioning improved (GAF)	%	2-21	4	*
	41. % Client functioning improved (IADL)	%	2-22	4	*
	42. % Client quality of life improved (QOLI)	%	2-23	4	*
	43. % Client satisfaction: VA mental health care	%	2-24	5	
	44. % Client satisfaction: MHICM vs. VA MH care	%	2-25	5	*
V. Cost	45. $ Cost per veteran	$	2-26	6	
	46. $ Cost per FTEE	$	2-26	6	
	47. $ Cost per visit	$	2-26	6	

*Critical MHICM monitor; + Minimum program standard; ~ Minimum standard replaces critical monitor standard.
^Chapter 2 summarizes table data; Appendix D provides a complete set of column definitions for all tables.

TABLE 2-2. MHICM PROGRAMS THROUGH FY 2003

VISN	SITE NAME ~	SITE CODE	SITE TYPE	MHICM START-UP YEAR
1	BEDFORD	518	NP	1995
1	BROCKTON	523A5	NP	1987
1	TOGUS	402	GM&S	1995
1	WEST HAVEN	689	GM&S	1987
2	ALBANY	528A8	GM&S	1987
2	BUFFALO	528	GM&S	1987
2	CANANDAIGUA	528A5	NP	1987
2	SYRACUSE	528A7	GM&S	1987
3	BROOKLYN	630A4	GM&S	1995
3	MONTROSE	620	NP	1987
3	NEW JERSEY	561	GM&S	1995
3	NORTHPORT	632	GM&S	2001
4	COATESVILLE	542	NP	1995
4	PITTSBURGH	646A5	NP	1994
5	BALTIMORE	512	GM&S	2002
5	PERRY POINT	512A5	NP	1994
5	WASHINGTON, DC	688	GM&S	2002
6	HAMPTON	590	GM&S	2002
6	SALEM	658	NP	2002
6	SALISBURY	659	NP	1994
7	ATLANTA	508	GM&S	1995
7	AUGUSTA	509	NP	1995
7	TUSCALOOSA	679	NP	2001
7	TUSKEGEE	619A4	NP	1995
8	GAINESVILLE	573	GM&S	1995
8	MIAMI	546	GM&S	1994
10	CHILLICOTHE	538	NP	1995
10	CINCINNATI	539	GM&S	1999
10	CLEVELAND	541	GM&S	1994
10	COLUMBUS	757	GM&S	1999
10	DAYTON	552	GM&S	1999
10	YOUNGSTOWN	541B2	GM&S	2001
11	ANN ARBOR	506	GM&S	1995
11	BATTLE CREEK	515	NP	1995
11	DETROIT	553	GM&S	1998
11	NORTHERN INDIANA	610	NP	2001
12	CHICAGO-WEST SIDE	537	GM&S	1992
12	MADISON	607	GM&S	1995
12	MILWAUKEE	695	GM&S	2001
12	NORTH CHICAGO	556	NP	1995
12	TOMAH	676	NP	2002
15	ST. LOUIS	657	GM&S	2003
16	GULF COAST	520	GM&S	2001
16	HOUSTON	580	GM&S	2001
16	LITTLE ROCK	598	GM&S	2000
16	NEW ORLEANS	629	GM&S	2001
17	DALLAS	549	GM&S	1995
19	DENVER	554	GM&S	1995
19	GRAND JUNCTION	575	GM&S	2000
19	SALT LAKE CITY	660	GM&S	2000
19	SOUTHERN COLORADO	567	NP	2000
20	AMERICAN LAKE	663A4	NP	1994
20	BOISE	531	GM&S	1995
20	PORTLAND	648	GM&S	1992
20	SEATTLE	663	GM&S	1995
21	PALO ALTO	640	GM&S	2002
21	SAN FRANCISCO	662	GM&S	1995
22	GREATER LOS ANGELES	691	GM&S	1994
23	IOWA CITY	636A8	GM&S	2003
23	KNOXVILLE	636A7	NP	1999
23	MINNEAPOLIS	618	GM&S	1995
23	OMAHA	636	GM&S	2003
23	ST.CLOUD	656	NP	2001

~MHICM teams (N=9) with insufficient data to be included in this Report: Albuquerque, Fayetteville NC, Fort Harrison, Mountain Home, Phoenix, Sheridan, Tampa, Topeka, Waco.

TABLE 2-3. ALLOCATED STAFF AND FUNDS (ORIGINAL DOLLARS)

VISN	SITE NAME	ALLOCATED FTE	PERSONAL SERVICE	ALL OTHER	ADMIN SUPPORT	TOTAL PROGRAM $
1	BEDFORD	6.20	$582,020	$15,000	$30,000	$627,020
1	BROCKTON	10.50	$392,315	$52,006	$0	$444,321
1	TOGUS	3.50	$200,000	$15,000	$20,000	$235,000
1	WEST HAVEN	11.00	$404,862	$27,000	$14,686	$446,548
2	ALBANY	10.00	$341,000	$1,985	$0	$342,985
2	BUFFALO	8.50	$273,000	$12,000	$0	$285,000
2	CANANDAIGUA	11.60	$343,052	$42,844	$0	$385,896
2	SYRACUSE	4.30	$174,671	$5,200	$11,500	$191,371
3	BROOKLYN	6.20	$300,000	$15,000	$30,000	$345,000
3	MONTROSE	4.50	$225,144	$85,456	$0	$310,600
3	NEW JERSEY	7.70	$562,527	$23,977	$26,000	$612,504
3	NORTHPORT	7.03	$601,865	$29,553	$0	$631,418
4	COATESVILLE	6.20	$300,000	$15,000	$30,000	$345,000
4	PITTSBURGH	6.50	$300,000	$25,000	$45,000	$370,000
5	BALTIMORE	4.70	$329,499	$14,883	$0	$344,382
5	PERRY POINT	6.50	$315,326	$25,000	$45,000	$385,326
5	WASHINGTON DC	3.00	$295,061	$15,034	$0	$310,095
6	HAMPTON	4.64	$319,021	$22,393	$0	$341,414
6	SALEM	4.20	$300,020	$0	$0	$300,020
6	SALISBURY	6.50	$300,000	$50,000	$45,000	$395,000
7	ATLANTA	5.20	$260,000	$15,000	$26,000	$301,000
7	AUGUSTA	6.20	$288,052	$15,000	$28,805	$331,857
7	TUSCALOOSA	8.10	$541,543	$18,798	$0	$560,341
7	TUSKEGEE	3.50	$200,000	$15,000	$20,000	$235,000
8	GAINESVILLE	5.20	$282,500	$15,000	$26,000	$323,500
8	MIAMI	7.30	$364,456	$23,620	$25,000	$413,076
10	CHILLICOTHE	6.20	$300,000	$15,000	$30,000	$345,000
10	CINCINNATI	4.00	$130,000	$9,000	$0	$139,000
10	CLEVELAND	6.50	$300,000	$25,000	$45,000	$370,000
10	COLUMBUS	4.00	$130,000	$9,000	$0	$139,000
10	DAYTON	4.00	$130,000	$9,000	$0	$139,000
10	YOUNGSTOWN	4.33	$309,266	$11,616	$0	$320,882
11	ANN ARBOR	5.20	$240,000	$15,000	$24,000	$279,000
11	BATTLE CREEK	6.20	$300,000	$15,000	$30,000	$345,000
11	DETROIT	9.30	$325,000	$75,000	$0	$400,000
11	MARION	6.20	$372,474	$11,436	$0	$383,910
12	CHICAGO-WEST SIDE	7.30	$267,600	$24,400	$0	$292,000
12	MADISON	3.50	$228,000	$15,000	$20,000	$263,000
12	MILWAUKEE	4.95	$343,727	$25,246	$0	$368,973
12	NORTH CHICAGO	6.20	$300,000	$15,000	$30,000	$345,000
12	TOMAH	3.88	$259,438	$13,351	$0	$272,789
15	ST.LOUIS	5.00	$290,123	$17,701	$0	$307,824
16	GULF COAST	4.20	$345,606	$13,308	$0	$358,914
16	HOUSTON	6.00	$457,160	$37,896	$0	$495,056
16	LITTLE ROCK	4.00	$305,889	$62,152	$0	$368,041
16	NEW ORLEANS	4.84	$397,012	$8,585	$0	$405,597
17	DALLAS	6.50	$303,107	$15,000	$28,000	$346,107
19	DENVER	6.20	$300,000	$15,000	$30,000	$345,000
19	GRAND JUNCTION	3.15	$253,661	$3,810	$0	$257,471
19	SALT LAKE CITY	5.75	$316,304	$6,445	$0	$322,749
19	SOUTHERN COLORADO	7.60	$256,396	$152,121	$0	$408,517
20	AMERICAN LAKE	6.50	$280,000	$25,000	$45,000	$350,000
20	BOISE	3.60	$236,000	$8,100	$23,600	$267,700
20	PORTLAND	7.00	$268,000	$19,500	$0	$287,500
20	SEATTLE	5.20	$260,000	$15,000	$26,000	$301,000
21	PALO ALTO	3.80	$303,085	$7,740	$0	$310,825
21	SAN FRANCISCO	6.50	$300,000	$15,000	$30,000	$345,000
22	GREATER LOS ANGELES	6.50	$300,000	$25,000	$45,000	$370,000
23	IOWA CITY	4.50	$276,281	$33,736	$0	$310,017
23	KNOXVILLE	7.85	$436,195	$14,786	$0	$450,981
23	MINNEAPOLIS	5.20	$260,000	$15,000	$26,000	$301,000
23	OMAHA	5.20	$325,156	$13,522	$0	$338,678
23	ST.CLOUD	3.70	$290,302	$18,530	$0	$308,832
	ALL SITES	369.32	$19,491,716	$1,425,730	$855,591	$21,773,037
	SITE AVERAGE	5.86	$309,392	$22,631	$13,581	$345,604
	SITE STD. DEV	1.91	$92,618	$22,698	$15,951	$96,865

Source: MHSHG Resource tables and initial site-generated Annual Reports.
~MHICM teams (N=9) with insufficient data to be included in this Report: Albuquerque, Fayetteville NC, Fort Harrison, Mountain Home, Phoenix, Sheridan, Tampa, Topeka, Waco.

TABLE 2-4. FY 2003 PROGRAM EXPENDITURES

VISN	SITE NAME	FY 2003 FILLED FTE	FY 2003 P/S EXPEND.	FY 2003 AO EXPEND.	FY 2003 TOTAL EXPEND.
1	Bedford	11.90	$919,993	$15,527	$935,520
1	Brockton	3.80	$295,092	$6,828	$301,920
1	Togus	3.45	$260,693	$14,770	$275,463
1	West Haven	6.43	$473,257	$23,718	$496,976
2	Albany	3.70	$311,596	$751	$312,347
2	Buffalo	6.40	$323,355	$10,515	$333,870
2	Canandaigua	8.80	$397,012	$6,828	$403,840
2	Syracuse	2.75	$180,857	$0	$180,857
3	Brooklyn	4.00	$301,975	$10,012	$311,987
3	Montrose	8.10	$798,850	$6,965	$805,815
3	New Jersey	7.90	$562,641	$26,012	$588,653
3	Northport	7.10	$601,865	$29,553	$631,418
4	Coatesville	6.30	$415,866	$5,100	$420,966
4	Pittsburgh	8.10	$596,464	$4,293	$600,757
5	Baltimore	5.20	$329,499	$14,883	$344,382
5	Perry Point	7.10	$404,961	$24,359	$429,320
5	Washington, DC	2.50	$295,061	$15,034	$310,095
6	Hampton	3.50	$319,021	$22,393	$341,414
6	Salem	4.55	$329,815	$0	$329,815
6	Salisbury	3.20	$267,612	$6,600	$274,212
7	Atlanta	6.20	$415,132	$15,485	$430,617
7	Augusta	5.50	$382,763	$24,000	$406,763
7	Tuscaloosa	7.60	$541,543	$18,798	$560,341
7	Tuskegee	5.00	$286,657	$23,615	$310,272
8	Gainesville	5.20	$409,435	$47,654	$457,089
8	Miami	5.25	$314,298	$22,866	$337,164
10	Chillicothe	5.10	$535,093	$19,211	$554,304
10	Cincinnati	4.90	$326,409	$29,328	$355,737
10	Cleveland	15.00	$1,096,482	$40,556	$1,137,038
10	Columbus	2.66	$187,666	$24,764	$212,430
10	Dayton	4.50	$309,062	$5,600	$314,662
10	Youngstown	5.00	$379,479	$10,631	$390,110
11	Ann Arbor	5.20	$327,612	$44,741	$372,353
11	Battle Creek	5.20	$371,638	$20,430	$392,068
11	Detroit	7.93	$405,862	$6,500	$412,362
11	Northern Indiana	8.20	$372,474	$11,436	$383,910
12	Chicago-West Side	5.75	$400,108	$18,580	$418,688
12	Madison	4.63	$343,146	$48,131	$391,277
12	Milwaukee	3.95	$340,628	$19,026	$359,654
12	North Chicago	11.50	$789,966	$32,119	$822,085
12	Tomah	4.75	$259,438	$13,351	$272,789
15	St. Louis	5.00	$290,123	$17,701	$307,824
16	Gulf Coast	4.20	$330,739	$8,921	$339,660
16	Houston	6.00	$515,860	$17,761	$533,621
16	Little Rock	3.75	$323,641	$25,976	$349,617
16	New Orleans	4.88	$397,012	$8,585	$405,597
17	Dallas	7.00	$430,028	$25,436	$455,464
19	Denver	6.50	$476,737	$1,221	$477,958
19	Grand Junction	4.40	$238,885	$0	$238,885
19	Salt Lake City	4.85	$371,823	$7,633	$379,456
19	Southern Colorado	6.25	$480,938	$186,525	$667,463
20	American Lake	3.40	$349,783	$2,000	$351,783
20	Boise	4.10	$379,497	$3,000	$382,497
20	Portland	6.60	$555,306	$21,991	$577,297
20	Seattle	4.80	$286,749	$2,000	$288,749
21	Palo Alto	4.20	$333,812	$8,400	$342,212
21	San Francisco	3.70	$337,670	$23,281	$360,951
22	Greater Los Angeles	4.00	$395,045	$19,240	$414,285
23	Iowa City	5.15	$276,281	$33,736	$310,017
23	Knoxville	8.60	$531,650	$32,810	$564,460
23	Minneapolis	6.20	$406,495	$14,310	$420,805
23	Omaha	5.00	$325,156	$13,522	$338,678
23	St. Cloud	3.60	$290,302	$18,530	$308,832
ALL SITES		355.98	$25,503,908	$1,233,542	$26,737,451
SITE AVERAGE		5.65	$404,824	$19,580	$424,404
SITE STD. DEV		2.24	$161,820	$24,157	$167,728

*Expenditures include space rental.

~MHICM teams (N=9) with insufficient data to be included in this Report: Albuquerque, Fayetteville NC, Fort Harrison, Mountain Home, Phoenix, Sheridan, Tampa, Topeka, Waco

Source: MHICM Local Progress Reports FY2003

TABLE 2-5. UTILIZATION OF STAFF RESOURCES

VISN	SITE NAME	ALLOCATED FTE	FY FILLED FTE	% FTE UTILIZED	SEPT. CLINICAL FTE^	FTE UNFILLED GTE 6 MO.	FTE ASSIGNED TO NON-MHICM
1	BEDFORD	12.90	11.90	92.2%	10.50	N	N
1	BROCKTON	5.80	3.80	65.5%	3.30	Y	Y
1	TOGUS	3.45	3.45	100.0%	2.70	N	Y
1	WEST HAVEN	9.13	6.43	70.4%	5.80	Y	N
2	ALBANY	4.45	3.70	83.1%	3.55	Y	N
2	BUFFALO	7.40	6.40	86.5%	5.00	N	Y
2	CANANDAIGUA	9.80	8.80	89.8%	9.30	N	N
2	SYRACUSE	3.75	2.75	73.3%	2.00	Y	Y
3	BROOKLYN	6.00	4.00	66.7%	4.50	Y	N
3	MONTROSE	8.10	8.10	100.0%	7.50	N	N
3	NEW JERSEY	8.90	7.90	88.8%	7.50	Y	Y
3	NORTHPORT	7.10	7.10	100.0%	6.60	N	N
4	COATESVILLE	6.30	6.30	100.0%	4.90	N	N
4	PITTSBURGH	9.10	8.10	89.0%	7.50	N	Y
5	BALTIMORE	5.20	5.20	100.0%	4.00	N	N
5	PERRY POINT	8.10	7.10	87.7%	5.50	Y	N
5	WASHINGTON, DC	5.00	2.50	50.0%	2.00	Y	N
6	HAMPTON	4.50	3.50	77.8%	3.20	Y	N
6	SALEM	4.55	4.55	100.0%	3.00	Y	Y
6	SALISBURY	4.20	3.20	76.2%	2.50	Y	N
7	ATLANTA	7.20	6.20	86.1%	5.50	Y	Y
7	AUGUSTA	6.50	5.50	84.6%	4.50	Y	Y
7	TUSCALOOSA	8.10	7.60	93.8%	5.50	Y	N
7	TUSKEGEE	6.00	5.00	83.3%	4.50	Y	N
8	GAINESVILLE	5.20	5.20	100.0%	4.00	N	N
8	MIAMI	6.25	5.25	84.0%	3.50	Y	N
10	CHILLICOTHE	6.10	5.10	83.6%	5.00	Y	Y
10	CINCINNATI	4.90	4.90	100.0%	3.50	N	N
10	CLEVELAND	15.00	15.00	100.0%	11.50	N	N
10	COLUMBUS	4.66	2.66	57.1%	2.33	Y	N
10	DAYTON	5.50	4.50	81.8%	3.50	Y	Y
10	YOUNGSTOWN	5.00	5.00	100.0%	3.50	N	N
11	ANN ARBOR	5.20	5.20	100.0%	3.50	N	N
11	BATTLE CREEK	6.20	5.20	83.9%	4.50	Y	N
11	DETROIT	7.93	7.93	100.0%	7.30	N	N
11	NORTHERN INDIANA	8.20	8.20	100.0%	6.50	N	N
12	CHICAGO-WEST SIDE	6.25	5.75	92.0%	5.00	Y	N
12	MADISON	4.63	4.63	100.1%	3.30	N	N
12	MILWAUKEE	3.95	3.95	100.0%	2.50	Y	N
12	NORTH CHICAGO	14.00	11.50	82.1%	9.50	Y	Y
12	TOMAH	4.75	4.75	100.0%	3.25	N	Y
15	ST. LOUIS	5.00	5.00	100.0%	3.50	N	N
16	GULF COAST	4.70	4.20	89.4%	3.50	Y	N
16	HOUSTON	6.00	6.00	100.0%	4.50	N	N
16	LITTLE ROCK	4.75	3.75	78.9%	3.00	Y	N
16	NEW ORLEANS	4.88	4.88	100.0%	3.50	N	N
17	DALLAS	8.00	7.00	87.5%	5.50	Y	N
19	DENVER	6.50	6.50	100.0%	5.50	N	N
19	GRAND JUNCTION	4.40	4.40	100.0%	3.90	N	Y
19	SALT LAKE CITY	5.85	4.85	82.9%	4.50	Y	Y
19	SOUTHERN COLORADO	6.25	6.25	100.0%	5.50	N	Y
20	AMERICAN LAKE	4.90	3.40	69.4%	4.10	N	N
20	BOISE	4.10	4.10	100.0%	3.00	N	N
20	PORTLAND	6.60	6.60	100.0%	5.60	N	N
20	SEATTLE	4.80	4.80	100.0%	2.60	Y	Y
21	PALO ALTO	4.20	4.20	100.0%	4.00	N	Y
21	SAN FRANCISCO	3.70	3.70	100.0%	3.00	N	N
22	GREATER LOS ANGELES	5.00	4.00	80.0%	3.50	Y	N
23	IOWA CITY	5.15	5.15	100.0%	3.50	N	N
23	KNOXVILLE	8.60	8.60	100.0%	7.00	N	N
23	MINNEAPOLIS	6.20	6.20	100.0%	4.50	N	N
23	OMAHA	5.00	5.00	100.0%	3.50	N	N
23	ST. CLOUD	3.60	3.60	100.0%	3.50	N	Y
ALL SITES		393.43	355.98	90.5%	293.73		
SITE AVERAGE		6.24	5.65	90.4%	4.66	46.0%	30.2%
SITE STD. DEV		2.31	2.24	12.0%	2.00		

* Extended staff vacancy in FY 2003.
^ Outlined values deviate from minimum staffing standard (4.0 Clinical FTE) or expected staffing.
~MHICM teams (N=9) with insufficient data to be included in this Report: Albuquerque, Fayetteville NC, Fort Harrison, Mountain Home, Phoenix, Sheridan, Tampa, Topeka, Waco.

Source: September 2003 FTE/Caseload Report

TABLE 2-6. CLINICAL STAFF AND CASELOAD

VISN	SITE NAME	*MEDICAL SUPPORT MD	*MEDICAL SUPPORT RN	CLINICAL FTE	9/03 TOTAL # VETS	9/03 CASELOAD per CLIN FTE^	TEAM TARGET CASELOAD MIN	TEAM TARGET CASELOAD MAX
1	BEDFORD	Y	Y	10.5	115	10.95	74	158
1	BROCKTON	N	N	3.3	63	19.09	23	50
1	TOGUS	Y	Y	2.7	22	8.15	19	41
1	WEST HAVEN	Y	Y	5.8	56	9.66	41	87
2	ALBANY	Y	Y	3.55	42	11.83	25	53
2	BUFFALO	Y	Y	5	61	12.20	35	75
2	CANANDAIGUA	N	Y	9.3	103	11.08	65	140
2	SYRACUSE	Y	Y	2	42	21.00	14	30
3	BROOKLYN	N	Y	4.5	45	10.00	32	68
3	MONTROSE	Y	Y	7.5	91	12.13	53	113
3	NEW JERSEY	Y	Y	7.5	78	10.40	53	113
3	NORTHPORT	N	Y	6.6	95	14.39	46	99
4	COATESVILLE	N	Y	4.9	71	14.49	34	74
4	PITTSBURGH	Y	Y	7.5	113	15.07	53	113
5	BALTIMORE	Y	Y	4	32	8.00	28	60
5	PERRY POINT	Y	Y	5.5	85	15.45	39	83
5	WASHINGTON, DC	Y	Y	2	21	10.50	14	30
6	HAMPTON	N	Y	3.2	48	15.00	22	48
6	SALEM	Y	Y	3	34	11.33	21	45
6	SALISBURY	Y	Y	2.5	25	10.00	18	38
7	ATLANTA	Y	Y	5.5	54	9.82	39	83
7	AUGUSTA	N	Y	4.5	67	14.89	32	68
7	TUSCALOOSA	Y	Y	5.5	61	11.09	39	83
7	TUSKEGEE	N	Y	4.5	41	9.11	32	68
8	GAINESVILLE	Y	Y	4	61	15.25	28	60
8	MIAMI	Y	Y	3.5	50	14.29	25	53
10	CHILLICOTHE	Y	Y	5	58	11.60	35	75
10	CINCINNATI	Y	Y	3.5	56	16.00	25	53
10	CLEVELAND	Y	Y	11.5	118	10.26	81	173
10	COLUMBUS	N	Y	2.33	22	9.44	16	35
10	DAYTON	N	Y	3.5	47	13.43	25	53
10	YOUNGSTOWN	Y	Y	3.5	35	10.00	25	53
11	ANN ARBOR	Y	Y	3.5	46	13.14	25	53
11	BATTLE CREEK	Y	Y	4.5	65	14.44	32	68
11	DETROIT	Y	Y	7.3	92	12.60	51	110
11	NORTHERN INDIANA	Y	Y	6.5	63	9.69	46	98
12	CHICAGO-WEST SIDE	Y	Y	5	66	13.20	35	75
12	MADISON	Y	Y	3.3	46	13.94	23	50
12	MILWAUKEE	Y	Y	2.5	26	10.40	18	38
12	NORTH CHICAGO	Y	Y	9.5	113	11.89	67	143
12	TOMAH	Y	Y	3.25	41	12.62	23	49
15	ST. LOUIS	N	Y	3.5	29	8.29	25	53
16	GULF COAST	Y	Y	3.5	49	14.00	25	53
16	HOUSTON	Y	Y	4.5	60	13.33	32	68
16	LITTLE ROCK	Y	Y	3	41	13.67	21	45
16	NEW ORLEANS	Y	Y	3.5	43	12.29	25	53
17	DALLAS	N	Y	5.5	68	12.36	39	83
19	DENVER	N	Y	5.5	70	12.73	39	83
19	GRAND JUNCTION	N	Y	3.9	41	10.51	27	59
19	SALT LAKE CITY	Y	Y	4.5	52	11.56	32	68
19	SOUTHERN COLORADO	N	Y	5.5	93	16.91	39	83
20	AMERICAN LAKE	Y	Y	4.1	48	11.71	29	61
20	BOISE	Y	Y	3	36	12.00	21	45
20	PORTLAND	Y	Y	5.6	65	11.61	39	84
20	SEATTLE	Y	Y	2.6	35	13.46	18	39
21	PALO ALTO	N	Y	4	41	10.25	28	60
21	SAN FRANCISCO	Y	Y	3	37	12.33	21	45
22	GREATER LOS ANGELES	N	Y	3.5	47	13.43	25	53
23	IOWA CITY	N	Y	3.5	43	12.29	25	53
23	KNOXVILLE	Y	Y	7	89	12.71	49	105
23	MINNEAPOLIS	Y	Y	4.5	68	15.11	32	68
23	OMAHA	N	Y	3.5	25	7.14	25	53
23	ST.CLOUD	Y	Y	3.5	34	9.71	25	53
ALL SITES		69.8%	98.4%	293.73	3584	12.20	2056	4406
SITE AVERAGE				4.66	56.9	12.31	32.9	70.3
SITE STD. DEV				2.00	24.5	2.54	14.1	30.1

*Medical Support assigned to team: N=No, Y=Yes
+Target Caseload ranges based on client:clinical FTE levels of 7:1 Minimum and 15:1 Maximum
^Outlined values fall outside minimum standard caseload range (7.0-15.0 clients per clinical FTE) or deviate from expected staffing.
~MHICM teams (N=9) with insufficient data to be included in this Report: Albuquerque, Fayetteville NC, Fort Harrison, Mountain Home, Phoenix, Sheridan, Tampa, Topeka, Waco.

Source: September 2003 FTE/Caseload Report

TABLE 2-7. DEMOGRAPHIC CHARACTERISTICS OF VETERANS AT INTAKE

	OVERALL	GM+S	NP
	(N= 4,083)	(N= 2,171)	(N= 1,912)
	#	#	#
AGE (Mean Years)	50.2	49.4	51.2
GENDER	%	%	%
Male	91.6	90.8	93.0
Female	8.4	9.2	7.0
RACE			
White, non-Hisp.	66.1	61.5	72.0
African-America	28.1	31.6	23.6
Hispanic	2.9	3.2	2.5
Other	0.9	1.1	0.7
Alaskan /American Indian	0.7	1.0	0.4
Asian or Pacific Islander	1.2	1.6	0.8
MARITAL STATUS			
Never Married	48.7	46.8	51.2
Divorced	29.8	30.5	28.9
Married	10.7	12.0	9.0
Separated	6.5	5.9	7.1
Widowed	3.5	3.8	3.3
Living w/signif. other	0.8	1.0	0.5
COMBAT EXPOSURE	20.5	20.9	19.9
EMPLOYMENT LAST 3 YR			
Disability	73.4	75.7	70.8
Hosp./Controlled Environment	4.7	2.6	7.3
Retired	5.4	5.5	5.2
Unemployed	4.4	3.5	5.5
Part-time/Irregular work	5.3	5.3	5.2
Full-time work	4.0	4.1	3.9
Part-time Regular work	2.0	2.4	1.6
Student/Volunteer work	0.7	0.8	0.5

Source: Client Interviews

TABLE 2-8. ENTRY CRITERIA INFORMATION

	OVERALL	GMS	NP
	(N= 4,083)	(N= 2,171)	(N= 1,912)
	#	#	#
MEAN HOSPITAL DAYS (1 Yr Pre)	87.9	65.9	116.8
	%	%	%
INP'T. PSYCH.UNIT REFERRAL	41.1	44.5	37.1
PRIM.PSYCHIATRIC DIAGNOSIS	100.0	100.0	100.0
GTE 30 DAYS IN HOSPITAL	76.6	75.5	78.1
DUAL DIAGNOSIS AT ENTRY	20.8	19.5	22.3
DIAGNOSIS			
Schizophrenia	56.8	57.4	56.4
Schizoaffective	19.3	21.2	17.0
Bipolar Disorder	16.4	16.2	16.4
Affective Disorder	6.1	5.3	6.9
PTSD	7.0	6.4	7.6
Psychosis/Other	3.2	3.6	2.8
Other Disorder	6.8	6.6	7.2
Anxiety Disorder	3.4	3.7	3.0
Alcohol Abuse/Dependence	16.0	13.9	18.5
Organic Brain Syndrome	1.6	1.4	1.9
Dementia	1.8	1.5	2.2
Borderline Personality Disorder	3.1	3.2	2.7
Drug Abuse/Dependence	10.5	10.8	10.0
Adjustment Disorder	0.7	0.7	0.8
DISABILITY/PENSION	94.2	94.9	93.4
SC DISABILITY	55.4	57.0	53.5
NSC PENSION	18.5	17.5	19.6
SSI	14.9	16.8	12.7
SSDI	49.4	49.0	50.1
PAYEE	49.2	47.8	50.7

Source: Client Interviews

TABLE 2-9. RECEIPT OF DISABILITY COMPENSATION OR PENSION INCOME

VISN	SITE	VA COMPENSATION %	NSC PENSION %	SSI %	SSDI %	REP PAYEE %	ANY DISABILITY %
1	Bedford	37.9	18.2	13.9	35.5	30.2	79.7
1	Brockton	45.7	17.1	14.3	40.0	68.6	94.3
1	Togus	73.9	8.7	17.4	43.5	78.3	100.0
1	West Haven	44.0	20.0	16.0	52.0	60.0	100.0
2	Albany	73.7	10.5	10.5	47.4	47.4	89.5
2	Buffalo	53.8	16.3	14.0	47.9	35.3	92.3
2	Canandaigua	56.5	25.0	14.8	51.6	66.1	98.4
2	Syracuse	36.6	17.9	12.2	43.9	32.5	85.4
3	Brooklyn	54.4	11.1	8.9	42.9	21.1	94.7
3	Montrose	62.2	20.5	17.6	50.0	81.1	98.6
3	New Jersey	58.6	18.4	11.8	52.3	50.0	98.9
3	Northport	76.0	8.7	4.3	56.0	25.0	100.0
4	Coatesville	65.1	15.0	17.1	37.3	56.6	97.6
4	Pittsburgh	50.4	28.0	6.3	43.7	27.0	92.1
5	Baltimore	52.9	15.2	20.6	41.2	55.9	94.1
5	Perry Point	63.5	20.8	10.5	45.8	67.4	96.9
5	Washington, DC	70.0	16.7	15.0	50.0	61.1	95.0
6	Hampton	66.7	24.2	3.0	28.1	36.4	93.9
6	Salem	61.3	6.5	12.9	61.3	45.2	93.5
6	Salisbury	51.6	38.7	6.5	61.3	45.2	100.0
7	Atlanta	91.7	3.2	8.6	69.4	44.4	97.2
7	Augusta	63.6	19.5	11.7	38.2	59.7	100.0
7	Tuscaloosa	46.8	10.9	14.9	73.9	71.7	97.9
7	Tuskegee	61.7	12.7	15.5	57.6	54.2	96.7
8	Gainesville	68.3	6.5	14.5	63.5	48.4	100.0
8	Miami	53.3	13.3	26.7	71.4	50.0	100.0
10	Chillicothe	45.5	14.8	13.0	40.7	43.6	87.3
10	Cincinnati	67.7	8.1	11.3	56.5	38.7	95.2
10	Cleveland	47.9	19.4	15.2	47.8	51.1	94.3
10	Columbus	54.2	30.4	16.7	62.5	45.8	100.0
10	Dayton	59.2	22.4	19.1	55.1	44.9	95.9
10	Youngstown	42.1	18.9	40.5	47.4	52.6	86.8
11	Ann Arbor	51.0	10.4	14.6	55.1	55.1	91.8
11	Battle Creek	54.7	13.7	18.9	63.5	56.8	97.3
11	Detroit	66.3	23.7	21.6	58.3	44.9	98.0
11	Northern Indiana	57.7	11.5	19.2	34.6	50.0	88.5
12	Chicago-West Side	35.7	13.5	25.9	37.0	24.1	96.4
12	Madison	43.5	22.2	8.9	65.2	50.0	93.5
12	Milwaukee	69.2	20.0	19.2	38.5	50.0	100.0
12	North Chicago	39.1	15.9	20.3	50.0	58.6	93.0
12	Tomah	30.0	30.0	20.0	70.0	50.0	90.0
15	St. Louis	41.9	30.0	20.0	45.2	35.5	87.1
16	Gulf Coast	54.4	19.3	14.3	53.6	24.6	93.0
16	Houston	40.0	15.9	32.3	36.9	50.8	96.9
16	Little Rock	54.8	28.2	11.9	38.1	73.8	100.0
16	New Orleans	76.5	14.3	7.8	49.0	44.0	100.0
17	Dallas	52.3	23.3	10.6	44.0	46.5	91.9
19	Denver	72.2	18.2	17.1	43.0	57.0	97.5
19	Grand Junction	32.5	15.0	10.0	50.0	22.5	80.0
19	Salt Lake City	70.9	9.1	16.4	65.5	78.2	96.4
19	Southern Colorado	74.0	23.1	8.7	48.1	65.4	98.1
20	American Lake	48.9	17.0	4.3	61.7	40.4	87.2
20	Boise	69.2	47.4	30.8	53.8	53.8	100.0
20	Portland	46.2	17.3	17.3	46.2	38.5	88.5
20	Seattle	53.8	25.0	12.8	39.5	46.2	100.0
21	Palo Alto	63.4	5.0	35.9	35.9	80.5	97.6
21	San Francisco	53.5	21.4	19.0	46.5	41.9	97.7
22	Greater Los Angeles	63.8	12.2	29.5	47.8	55.6	87.2
23	Iowa City	57.4	10.6	10.9	50.0	37.0	87.2
23	Knoxville	47.5	32.3	2.0	58.6	44.9	88.9
23	Minneapolis	53.7	17.9	13.6	62.1	38.8	97.0
23	Omaha	56.5	20.0	4.3	43.5	60.9	91.3
23	St. Cloud	54.1	16.7	19.4	63.9	48.6	97.3
	ALL SITES	55.5	18.5	14.9	49.4	49.2	94.2
	SITE AVERAGE	56.2	18.1	15.4	50.3	49.5	94.5
	SITE STD. DEV.	12.3	8.0	7.6	10.4	14.4	5.1

Source: Client Interview

TABLE 2-10. ENTRY CRITERIA INFORMATION BY SITE

VISN	SITE	LIFETIME HOSP GT 2 YRS %	YEARS SINCE 1ST HOSP. #	GTE 30 DAYS HOSP. YR PREV %	PSYCHOTIC DX AT ENTRY %	DUAL DIAGNOSIS %
1	Bedford	29.5	20.1	62.4	68.6	54.2
1	Brockton	79.4	25.1	**97.1**	94.3	8.6
1	Togus	52.4	25.9	95.7	95.7	
1	West Haven	54.2	23.4	92.0	84.0	28.0
2	Albany	26.3	18.7	52.6	84.2	57.9
2	Buffalo	23.8	24.9	*25.5*	90.4	25.0
2	Canandaigua	71.7	26.2	87.1	95.2	33.9
2	Syracuse	22.5	16.9	82.1	68.3	24.4
3	Brooklyn	34.0	19.7	82.1	86.0	14.0
3	Montrose	85.7	26.4	90.5	97.3	10.8
3	New Jersey	50.0	25.4	68.2	92.0	31.0
3	Northport	42.9	24.7	96.0	84.0	16.0
4	Coatesville	67.5	24.9	87.8	92.8	25.3
4	Pittsburgh	40.2	23.0	88.0	93.7	10.2
5	Baltimore	63.6	25.2	90.0	97.1	14.7
5	Perry Point	87.8	33.0	**100.0**	**99.0**	6.3
5	Washington, DC	35.3	22.4	*47.1*	90.0	10.0
6	Hampton	59.4	22.1	75.8	75.8	54.5
6	Salem	44.4	21.4	50.0	80.6	48.4
6	Salisbury	63.3	25.5	90.3	96.8	19.4
7	Atlanta	60.6	22.1	**100.0**	91.7	
7	Augusta	83.1	24.0	**98.7**	94.8	3.9
7	Tuscaloosa	76.6	26.5	**97.8**	93.6	10.6
7	Tuskegee	20.0	22.9	59.3	90.0	5.0
8	Gainesville	48.3	23.2	76.2	90.5	4.8
8	Miami	35.7	26.0	50.0	93.3	13.3
10	Chillicothe	58.5	19.8	89.1	83.6	12.7
10	Cincinnati	32.3	21.2	63.2	96.8	12.9
10	Cleveland	45.3	24.8	83.0	95.7	16.4
10	Columbus	26.1	18.4	75.0	95.8	12.5
10	Dayton	27.7	20.4	60.4	89.8	8.2
10	Youngstown	14.7	26.4	*39.5*	84.2	21.1
11	Ann Arbor	26.8	20.2	81.3	**98.0**	30.6
11	Battle Creek	67.6	23.9	88.0	88.0	12.0
11	Detroit	61.0	23.9	92.8	96.9	20.4
11	Northern Indiana	69.2	25.0	**100.0**	84.6	30.8
12	Chicago-West Side	27.3	20.8	92.5	92.9	12.5
12	Madison	40.0	22.3	75.6	95.7	19.6
12	Milwaukee	39.1	22.9	*17.4*	**100.0**	19.2
12	North Chicago	60.7	24.4	74.0	85.9	20.3
12	Tomah	50.0	25.3	70.0	90.0	40.0
15	St. Louis	25.9	19.9	55.2	80.6	35.5
16	Gulf Coast	32.7	22.2	80.7	71.9	31.6
16	Houston	29.7	23.2	*48.4*	92.3	33.8
16	Little Rock	29.4	25.1	81.0	92.9	4.8
16	New Orleans	46.5	25.2	58.8	**100.0**	7.8
17	Dallas	30.0	18.8	91.9	93.0	22.1
19	Denver	37.8	20.2	94.9	93.7	27.8
19	Grand Junction	15.0	19.6	*44.7*	85.0	40.0
19	Salt Lake City	41.2	22.6	*38.2*	94.5	23.6
19	Southern Colorado	55.4	26.4	*19.2*	90.4	11.5
20	American Lake	36.4	18.4	**97.9**	**100.0**	23.4
20	Boise	25.0	21.8	*38.5*	97.4	23.1
20	Portland	23.1	19.3	**98.1**	**98.1**	23.1
20	Seattle	41.2	27.1	63.2	92.3	23.1
21	Palo Alto	80.5	24.4	**100.0**	**100.0**	34.1
21	San Francisco	31.0	22.5	81.4	90.7	32.6
22	Greater Los Angeles	58.7	21.3	**97.8**	87.2	25.5
23	Iowa City	28.9	26.9	67.4	85.1	12.8
23	Knoxville	46.2	21.1	93.9	77.8	17.2
23	Minneapolis	50.0	22.1	**97.0**	**98.5**	4.5
23	Omaha	39.1	25.4	68.2	82.6	26.1
23	St. Cloud	47.1	24.0	56.8	83.8	48.6
ALL SITES		46.8	23.2	76.6	90.2	20.8
SITE AVERAGE		45.3	23.1	74.9	90.2	22.2
SITE STD. DEV.		18.7	2.8	21.9	7.5	13.2

^ Shaded values do not meet the minimum standard (50% with 30+ hospital days in year prior to entry.)
Source: Client Interview

TABLE 2-11. CLINICAL STATUS AT ENTRY

VISN	SITE	INPATIENT AT ENTRY %	LOW IADL %	BPRS MEAN #	GAF MEAN #
1	Bedford	30.7	40.1	36.3	41.2
1	Brockton	11.4	54.5	39.6	31.6
1	Togus	69.6	43.5	33.7	43.6
1	West Haven	84.0	48.0	41.2	30.8
2	Albany	10.5	26.3	49.2	35.1
2	Buffalo	5.8	73.5	36.7	34.8
2	Canandaigua	6.5	45.0	39.5	32.2
2	Syracuse	32.5	61.0	43.5	40.2
3	Brooklyn	42.1	53.6	44.2	38.8
3	Montrose	67.6	69.2	48.6	39.5
3	New Jersey	48.3	51.8	41.7	43.1
3	Northport	44.0	58.3	43.5	44.0
4	Coatesville	43.4	67.5	42.9	38.6
4	Pittsburgh	54.3	48.0	35.6	37.3
5	Baltimore	45.5	81.3	45.6	43.0
5	Perry Point	59.4	61.6	46.8	39.0
5	Washington, DC	16.7	66.7	49.8	40.5
6	Hampton	9.1	42.4	43.3	40.7
6	Salem	3.2	34.5	37.9	47.0
6	Salisbury	41.9	55.2	40.3	40.8
7	Atlanta	88.9	64.7	36.1	46.7
7	Augusta	62.3	47.9	30.0	44.0
7	Tuscaloosa	29.8	60.5	29.4	41.2
7	Tuskegee	86.7	73.3	37.5	50.2
8	Gainesville	39.7	58.1	49.8	42.1
8	Miami	35.7	53.3	38.2	34.8
10	Chillicothe	72.7	31.5	34.4	39.8
10	Cincinnati	41.9	49.2	35.2	42.7
10	Cleveland	43.6	51.1	36.5	35.5
10	Columbus	20.8	45.8	36.7	44.1
10	Dayton	34.7	34.7	29.3	49.2
10	Youngstown	5.3	55.6	40.3	50.8
11	Ann Arbor	34.7	61.4	42.8	35.6
11	Battle Creek	16.0	54.9	37.5	46.9
11	Detroit	67.0	56.0	33.3	43.4
11	Northern Indiana	73.1	44.0	41.5	47.0
12	Chicago-West Side	33.9	53.6	40.0	36.6
12	Madison	48.9	44.4	36.4	43.6
12	Milwaukee	0.0	73.1	51.2	43.7
12	North Chicago	47.7	37.4	33.0	34.3
12	Tomah	0.0	40.0	46.3	40.2
15	St. Louis	54.8	56.7	63.4	37.3
16	Gulf Coast	15.8	50.9	40.2	47.4
16	Houston	23.1	60.0	43.0	40.3
16	Little Rock	14.3	65.8	38.7	25.1
16	New Orleans	52.9	60.4	49.6	33.6
17	Dallas	82.6	57.0	36.9	39.2
19	Denver	70.9	52.0	35.4	37.9
19	Grand Junction	52.5	52.5	57.9	36.3
19	Salt Lake City	21.8	50.9	53.4	33.7
19	Southern Colorado	3.8	45.6	33.3	42.8
20	American Lake	21.3	52.2	45.7	39.6
20	Boise	5.3	43.6	36.5	40.6
20	Portland	65.4	76.0	39.7	30.5
20	Seattle	20.5	61.5	56.2	38.4
21	Palo Alto	12.2	92.7	47.8	38.6
21	San Francisco	34.9	57.1	44.2	36.1
22	Greater Los Angeles	68.1	57.4	46.3	47.0
23	Iowa City	61.7	57.8	43.2	24.9
23	Knoxville	8.1	59.2	37.3	34.9
23	Minneapolis	75.8	37.5	44.9	35.2
23	Omaha	34.8	69.6	37.2	34.0
23	St. Cloud	29.7	36.4	45.7	42.2
	ALL SITES	41.1	53.6	40.2	39.4
	SITE AVERAGE	38.7	54.4	41.4	39.5
	SITE STD. DEV.	24.9	12.4	6.8	5.5

Shaded values are greater than or equal to 50

Source: Client Interview

TABLE 2-12. MHICM PROGRAM TENURE

VISN	SITE	TOTAL VETS FY03	VETS DISCHARGED #	VETS DISCHARGED %	MEAN DAYS IN PROGRAM PER VET
1	Bedford	154	39	25.3%	1,423
1	Brockton	69	6	8.7%	1,709
1	Togus	25	3	12.0%	1,900
1	West Haven	59	3	**5.1%**	1,594
2	Albany	46	5	10.9%	947
2	Buffalo	74	14	18.9%	907
2	Canandaigua	117	15	12.8%	1,498
2	Syracuse	52	11	21.2%	1,268
3	Brooklyn	57	12	21.1%	1,479
3	Montrose	111	19	17.1%	1,321
3	New Jersey	90	0	**0.0%**	1,217
3	Northport	114	19	16.7%	309
4	Coatesville	83	16	19.3%	2,014
4	Pittsburgh	129	18	14.0%	1,449
5	Baltimore	34	2	5.9%	640
5	Perry Point	97	12	12.4%	1,511
5	Washington, DC	24	4	16.7%	284
6	Hampton	64	18	28.1%	280
6	Salem	42	7	16.7%	325
6	Salisbury	35	15	42.9%	1,254
7	Atlanta	57	3	**5.3%**	2,040
7	Augusta	77	10	13.0%	1,885
7	Tuscaloosa	70	8	11.4%	320
7	Tuskegee	66	25	37.9%	1,378
8	Gainesville	63	7	11.1%	2,011
8	Miami	54	4	7.4%	348
10	Chillicothe	62	5	8.1%	1,635
10	Cincinnati	62	7	11.3%	947
10	Cleveland	141	24	17.0%	784
10	Columbus	25	4	16.0%	1,233
10	Dayton	51	6	11.8%	942
10	Youngstown	41	6	14.6%	660
11	Ann Arbor	49	4	8.2%	1,801
11	Battle Creek	78	13	16.7%	1,360
11	Detroit	103	12	11.7%	1,253
11	Northern Indiana	73	12	16.4%	348
12	Chicago-West Side	73	8	11.0%	1,178
12	Madison	47	2	**4.3%**	1,426
12	Milwaukee	26	2	7.7%	568
12	North Chicago	132	23	17.4%	1,605
12	Tomah	41	1	**2.4%**	313
15	St. Louis	32	2	6.3%	185
16	Gulf Coast	57	8	14.0%	348
16	Houston	65	5	7.7%	577
16	Little Rock	45	3	6.7%	467
16	New Orleans	52	9	17.3%	354
17	Dallas	86	18	20.9%	1,449
19	Denver	80	10	12.5%	1,511
19	Grand Junction	42	2	**4.8%**	862
19	Salt Lake City	58	8	13.8%	590
19	Southern Colorado	106	16	15.1%	942
20	American Lake	48	2	**4.2%**	1,917
20	Boise	40	4	10.0%	1,907
20	Portland	76	11	14.5%	1,074
20	Seattle	39	5	12.8%	1,611
21	Palo Alto	42	1	**2.4%**	341
21	San Francisco	43	7	16.3%	1,480
22	Greater Los Angeles	49	2	**4.1%**	2,177
23	Iowa City	48	5	10.4%	303
23	Knoxville	100	13	13.0%	672
23	Minneapolis	70	4	5.7%	1,445
23	Omaha	25	1	**4.0%**	186
23	St. Cloud	38	4	10.5%	483
ALL SITES		4,108	564	13.7 %	1,200
SITE AVERAGE		65.2	9	12.9 %	1,083
SITE STD. DEV.		30.2	7	7.6 %	585

^Shaded values exceed the threshold level (20%) for the minimum program standard.
Source: Clinical Progrss Reports as of 9/30/03

TABLE 2-13. PATTERN OF SERVICE DELIVERY

VISN	SITE	Total VETS #	CONTACT FREQUENCY % WEEKLY OR MORE FACE-FACE	CONTACT FREQUENCY % WEEKLY OR MORE TELEPHONE	INTENSITY GTE 1 HOUR PER WEEK CONTACT	LOCATION 60% OR MORE CONTACT IN COMMUNITY
1	Bedford	154	96.1	64.3	65.6	74.0
1	Brockton	69	78.3	26.1	55.1	82.6
1	Togus	25	96.0	44.0	**84.0**	96.0
1	West Haven	59	88.1	69.5	72.9	88.1
2	Albany	46	65.2	37.0	63.0	54.3
2	Buffalo	74	73.0	43.2	33.8	93.2
2	Canandaigua	117	83.8	38.5	**83.8**	76.9
2	Syracuse	52	69.2	50.0	55.8	59.6
3	Brooklyn	57	61.4	68.4	70.2	84.2
3	Montrose	111	87.4	17.1	22.5	91.9
3	New Jersey	90	86.7	57.8	64.4	97.8
3	Northport	114	93.9	42.1	57.0	94.7
4	Coatesville	83	77.1	56.6	59.0	68.7
4	Pittsburgh	129	84.5	58.9	51.2	84.5
5	Baltimore	34	82.4	64.7	67.6	82.4
5	Perry Point	97	97.9	22.7	**95.9**	96.9
5	Washington, DC	24	95.8	54.2	79.2	50.0
6	Hampton	64	92.2	57.8	65.6	84.4
6	Salem	42	81.0	47.6	45.2	78.6
6	Salisbury	35	85.7	51.4	**82.9**	**100.0**
7	Atlanta	57	89.5	77.2	43.9	77.2
7	Augusta	77	84.4	58.4	**81.8**	84.4
7	Tuscaloosa	70	90.0	47.1	51.4	92.9
7	Tuskegee	66	86.4	50.0	60.6	84.8
8	Gainesville	63	88.9	73.0	76.2	95.2
8	Miami	54	98.1	59.3	75.9	98.1
10	Chillicothe	62	95.2	61.3	62.9	96.8
10	Cincinnati	62	88.7	61.3	33.9	93.5
10	Cleveland	141	98.6	56.0	53.2	99.3
10	Columbus	25	100.0	72.0	76.0	96.0
10	Dayton	51	90.2	78.4	72.5	**100.0**
10	Youngstown	41	97.6	78.0	63.4	97.6
11	Ann Arbor	49	57.1	46.9	53.1	91.8
11	Battle Creek	78	89.7	43.6	41.0	98.7
11	Detroit	103	62.1	35.0	40.8	89.3
11	Northern Indiana	73	60.3	31.5	39.7	80.8
12	Chicago-West Side	73	91.8	43.8	71.2	94.5
12	Madison	47	91.5	34.0	63.8	78.7
12	Milwaukee	26	100.0	38.5	73.1	**100.0**
12	North Chicago	132	90.9	34.1	72.0	84.1
12	Tomah	41	87.8	70.7	70.7	63.4
15	St. Louis	32	90.6	81.3	78.1	93.8
16	Gulf Coast	57	91.2	64.9	77.2	98.2
16	Houston	65	95.4	40.0	53.8	93.8
16	Little Rock	45	95.6	55.6	**84.4**	93.3
16	New Orleans	52	90.4	71.2	73.1	96.2
17	Dallas	86	86.0	55.8	37.2	82.6
19	Denver	80	86.3	45.0	56.3	90.0
19	Grand Junction	42	97.6	81.0	**90.5**	78.6
19	Salt Lake City	58	96.6	75.9	**84.5**	94.8
19	Southern Colorado	106	87.7	24.5	35.8	99.1
20	American Lake	48	91.7	58.3	70.8	97.9
20	Boise	40	82.5	55.0	65.0	85.0
20	Portland	76	90.8	60.5	73.7	94.7
20	Seattle	39	84.6	61.5	61.5	92.3
21	Palo Alto	42	88.1	66.7	71.4	88.1
21	San Francisco	43	93.0	14.0	16.3	86.0
22	Greater Los Angeles	49	73.5	69.4	77.6	85.7
23	Iowa City	48	85.4	66.7	60.4	91.7
23	Knoxville	100	98.0	49.0	51.0	**100.0**
23	Minneapolis	70	95.7	55.7	68.6	98.6
23	Omaha	25	100.0	72.0	**88.0**	**100.0**
23	St. Cloud	38	97.4	50.0	39.5	89.5
ALL SITES		4108	87.3	51.4	60.8	88.6
SITE AVERAGE		65.2	87.5	53.9	63.0	88.4
SITE STD. DEV.		30.2	10.3	16.1	17.0	11.2

~Shaded values do not meet the minimum standard of 50% or more contact in community.
Bold /Underlined values represent positive outliers.
Source: Clinical Progress Reports as of 9/30/03

TABLE 2-14. OUTPATIENT CLINIC VISITS

VISN	SITE	TOTAL VETS SEEN	MEAN CONTACTS per VET:12 MONTH TOTAL	TELEPHONE	FACE:FACE	FY 2003 MEAN AMOUNT OF TIME IN PGM	ADJUSTED FACE-FACE CONTACTS/ VETERAN	ADJUSTED FACE-FACE CONTACTS/ WK/VETERAN^
1	Bedford	153	101.52	9.07	92.45	0.73	126.6	**2.43**
1	Brockton	68	40.59	7.47	33.12	0.90	36.6	0.70
1	Togus	25	66.16	8.24	57.92	0.87	66.8	1.28
1	West Haven	58	92.36	22.05	70.31	0.92	76.5	1.47
2	Albany	45	90.69	7.36	83.33	0.93	89.8	1.73
2	Buffalo	72	45.44	5.93	39.51	0.84	47.0	0.90
2	Canandaigua	109	90.25	1.98	88.27	0.90	98.5	1.89
2	Syracuse	52	43.88	9.56	34.33	0.87	39.6	0.76
3	Brooklyn	54	45.63	18.96	26.67	0.84	31.8	0.61
3	Montrose	101	54.40	3.06	51.34	0.87	58.9	1.13
3	New Jersey	88	40.56	4.31	36.24	0.83	43.8	0.84
3	Northport	107	61.59	3.66	57.92	0.83	69.6	1.34
4	Coatesville	79	50.44	7.86	37.46	0.81	46.3	0.89
4	Pittsburgh	128	36.84	0.91	35.93	0.82	44.0	0.85
5	Baltimore	32	35.25	2.03	33.22	0.66	50.0	0.96
5	Perry Point	94	60.57	0.16	60.41	0.94	64.6	1.24
5	Washington, DC	24	78.21	7.00	71.21	0.72	99.0	1.90
6	Hampton	61	64.51	4.46	60.02	0.73	82.3	1.58
6	Salem	41	39.34	1.05	37.24	0.76	48.7	0.94
6	Salisbury	34	46.82	1.26	42.68	0.64	66.7	1.28
7	Atlanta	56	97.93	16.41	81.52	0.98	83.5	1.61
7	Augusta	72	70.49	2.63	67.86	0.86	79.2	1.52
7	Tuscaloosa	68	76.60	6.65	69.96	0.79	89.1	1.71
7	Tuskegee	54	45.56	0.00	45.56	0.71	64.6	1.24
8	Gainesville	63	58.46	1.29	57.17	0.90	63.4	1.22
8	Miami	54	84.89	0.91	83.98	0.89	94.5	1.82
10	Chillicothe	62	62.21	2.52	59.69	0.84	71.2	1.37
10	Cincinnati	62	47.10	0.98	46.11	0.87	52.8	1.02
10	Cleveland	140	67.22	0.00	67.17	0.81	83.3	1.60
10	Columbus	25	60.40	2.92	57.48	0.75	76.3	1.47
10	Dayton	49	47.47	0.00	47.47	0.82	58.0	1.12
10	Youngstown	39	83.49	0.00	83.49	0.86	97.1	1.87
11	Ann Arbor	49	81.61	3.18	78.43	0.95	82.6	1.59
11	Battle Creek	78	56.54	3.32	52.77	0.81	65.4	1.26
11	Detroit	100	33.29	0.00	33.29	0.88	37.7	0.73
11	Northern Indiana	69	58.16	0.00	58.14	0.75	77.8	1.50
12	Chicago-West Side	71	66.42	5.38	61.04	0.89	68.4	1.31
12	Madison	47	188.77	0.00	188.77	0.90	210.4	**4.05**
12	Milwaukee	26	89.88	6.27	83.62	0.87	96.0	1.85
12	North Chicago	130	102.58	2.37	100.21	0.84	119.0	**2.29**
12	Tomah	40	144.78	3.55	141.23	0.94	149.9	**2.88**
15	St. Louis	32	36.53	7.88	28.66	0.39	73.0	1.40
16	Gulf Coast	53	85.36	12.38	72.98	0.72	101.1	**1.94**
16	Houston	63	46.59	1.41	45.17	0.82	54.9	1.06
16	Little Rock	42	83.88	5.74	70.93	0.80	89.2	1.71
16	New Orleans	50	33.06	2.74	30.32	0.73	41.4	0.80
17	Dallas	83	61.72	0.02	61.70	0.83	74.7	1.44
19	Denver	78	40.97	0.03	40.95	0.91	45.0	0.87
19	Grand Junction	41	77.80	4.80	73.00	0.87	84.0	1.62
19	Salt Lake City	54	43.52	0.04	43.46	0.93	46.6	0.90
19	Southern Colorado	98	48.72	1.44	47.28	0.90	52.5	1.01
20	American Lake	48	53.17	0.27	52.90	0.92	57.4	1.10
20	Boise	39	22.15	0.00	22.15	0.90	24.5	0.47
20	Portland	76	68.37	6.11	62.05	0.85	73.1	1.41
20	Seattle	38	75.82	4.61	71.21	0.88	80.7	1.55
21	Palo Alto	42	53.86	7.05	46.81	0.86	54.7	1.05
21	San Francisco	40	52.73	0.05	52.68	0.89	59.0	1.13
22	Greater Los Angeles	46	22.09	6.54	15.54	0.95	16.4	0.32
23	Iowa City	42	27.95	0.07	27.79	0.69	40.4	0.78
23	Knoxville	97	53.90	4.52	49.38	0.85	58.2	1.12
23	Minneapolis	68	53.37	1.09	52.28	0.95	55.1	1.06
23	Omaha	25	44.04	1.32	42.72	0.48	88.7	1.71
23	St. Cloud	37	35.38	0.00	34.84	0.79	44.0	0.85
ALL SITES		3971	62.90	3.83	58.83	0.84	70.3	1.35
SITE AVERAGE		63.03	62.38	4.01	58.08	0.83	70.19	1.35
SITE STD. DEV.		29.07	27.69	4.55	27.23	0.10	30.21	0.58

^Shaded values do not meet the minimum standard of at least 1 face-to-face contact per client per week.
Bold /Underlined values exceed one standard deviation from the mean in desired direction.
Source: Outpatient clinic visits entered under DSS Identifiers 546 and 552 between 10/01/02 and 9/30/03.
*Corrected outpatient clinic visit totals provided by facility.

TABLE 2-15. THERAPEUTIC SERVICES

VISN	SITE	FOLLOW-UP VETS #	SUPPORTIVE CONTACT %	ACTIVE MONITOR %	REHABIL-ITATION %	PSYCHOTHER. RELATIONSHIP %	SOCIAL/REC. ACTIVITIES %	CRISIS INTERVENT %	MEDICATN MGMT %	MEDICAL SCREEN %	SEEN FOR SUB. ABUSE %	HOUSING SUPPORT %	VOCATION SUPPORT %
1	Bedford	154	95.7	93.0	46.5	93.9	67.5	77.2	82.3	78.1	75.4	59.6	34.2
1	Brockton	69	98.4	98.4	38.1	79.4	66.7	38.1	88.9	70.5	12.7	38.1	11.1
1	Togus	25	100.0	100.0	**76.2**	100.0	38.1	19.0	100.0	100.0		28.6	4.8
1	West Haven	59	100.0	100.0	**73.9**	91.3	67.4	63.0	84.8	65.2	52.2	63.0	37.0
2	Albany	46	97.5	100.0	65.0	90.0	52.5	64.1	92.5	67.5	45.0	65.0	37.5
2	Buffalo	74	100.0	100.0	11.3	73.0	27.0	63.5	60.3	37.1	17.5	28.6	7.9
2	Canandaigua	117	93.1	94.3	66.7	83.9	89.7	24.1	72.4	80.5	14.9	26.4	5.7
2	Syracuse	52	90.0	87.5	70.0	20.5	27.5	65.0	35.0	22.5	17.5	37.5	15.0
3	Brooklyn	57	100.0	96.6	**72.4**	72.4	34.5	75.9	48.3	27.6	10.3	24.1	3.4
3	Montrose	111	91.5	91.4	17.4	33.0	47.9	66.0	76.6	89.4	2.2	9.6	2.2
3	New Jersey	90	98.3	98.3	36.2	91.4	84.5	67.2	93.1	67.2	24.6	51.7	14.3
3	Northport	114	99.0	99.0	30.7	99.0	61.4	64.4	77.2	68.3	18.0	75.0	28.0
4	Coatesville	83	98.4	95.2	38.1	77.8	69.8	87.3	90.5	87.3	39.7	84.1	17.5
4	Pittsburgh	129	98.8	96.3	29.6	80.5	12.3	36.6	87.8	53.7	9.8	14.6	6.1
5	Baltimore	34	80.0	73.3	33.3	66.7	40.0	73.3	73.3	73.3	40.0	60.0	13.3
5	Perry Point	97	96.6	100.0	58.4	88.8	93.3	62.9	96.6	79.8	51.7	94.4	53.9
5	Washington, DC	24	100.0	100.0	50.0	100.0	75.0	87.5	100.0	93.8	43.8	68.8	37.5
6	Hampton	64	94.2	98.0	58.8	92.2	58.8	94.1	94.1	86.3	70.6	52.9	25.5
6	Salem	42	96.4	96.4	35.7	96.4	28.6	85.7	64.3	78.6	78.6	64.3	10.7
6	Salisbury	35	100.0	100.0	67.9	71.4	82.1	78.6	92.9	89.3	21.4	89.3	21.4
7	Atlanta	57	95.2	97.6	26.2	59.5	26.2	59.5	97.6	83.3	16.7	50.0	9.5
7	Augusta	77	84.2	86.8	65.8	86.8	78.9	84.2	81.6	81.6	57.9	60.5	42.1
7	Tuscaloosa	70	100.0	100.0	16.1	77.2	63.2	71.9	91.2	89.5	15.8	38.6	12.3
7	Tuskegee	66	75.7	70.3	51.4	48.6	62.2	62.2	56.8	56.8	40.5	51.4	32.4
8	Gainesville	63	100.0	100.0	38.6	84.2	94.7	71.9	94.7	78.6	33.9	42.1	1.8
8	Miami	54	100.0	100.0	64.3	100.0	97.6	92.9	92.9	85.7	21.4	59.5	43.9
10	Chillicothe	62	95.5	95.5	**72.7**	90.9	93.2	59.1	88.6	43.2	4.5	68.2	59.1
10	Cincinnati	62	96.2	94.2	59.6	63.5	71.2	73.1	57.7	53.8	28.8	61.5	9.6
10	Cleveland	141	92.9	96.0	42.4	86.9	57.1	62.6	69.7	80.6	35.4	54.5	28.6
10	Columbus	25	100.0	100.0	**85.0**	85.0	85.0	85.0	65.0	55.0	15.0	40.0	20.0
10	Dayton	51	100.0	91.3	34.8	87.0	82.6	60.9	73.9	69.6	21.7	34.8	9.1
10	Youngstown	41	100.0	100.0	48.3	55.2	79.3	65.5	79.3	89.7	34.5	44.8	6.9
11	Ann Arbor	49	100.0	100.0	69.0	81.0	95.2	50.0	100.0	85.7	42.9	69.0	28.6
11	Battle Creek	78	100.0	100.0	**89.6**	100.0	100.0	91.0	79.1	82.1	73.1	93.9	65.7
11	Detroit	103	98.8	96.3	23.8	82.3	49.4	80.0	96.3	86.3	33.8	33.8	8.8
11	Northern Indiana	73	88.5	84.6	42.3	76.9	71.2	59.6	63.5	61.5	15.4	51.0	15.7
12	Chicago-West Side	73	97.7	97.8	**75.6**	88.9	8.9	64.4	82.2	68.9	28.9	31.1	2.2
12	Madison	47	97.5	97.5	35.9	95.0	80.0	70.0	92.3	90.0	40.0	71.8	22.5

VISN	SITE	FOLLOW-UP VETS #	SUPPORTIVE CONTACT %	ACTIVE MONITOR %	REHABIL-ITATION %	PSYCHOTHER. RELATIONSHIP %	SOCIAL/REC. ACTIVITIES %	CRISIS INTERVENT %	MEDICATN MGMT %	MEDICAL SCREEN %	SEEN FOR SUB. ABUSE %	HOUSING SUPPORT %	VOCATION SUPPORT %
12	Milwaukee	26	100.0	95.2	42.9	95.2	85.7	71.4	100.0	90.5	57.1	42.9	28.6
12	North Chicago	132	100.0	92.3	55.8	76.0	76.0	48.1	62.5	64.4	19.2	61.5	20.2
12	Tomah	41	97.2	97.1	30.6	63.9	80.6	63.9	97.2	94.4	33.3	47.2	22.2
15	St. Louis	32	93.3	85.7	64.3	80.0	73.3	53.3	53.3	73.3	60.0	60.0	26.7
16	Gulf Coast	57	97.0	97.0	54.5	97.0	75.8	63.6	66.7	60.6	42.4	30.3	15.2
16	Houston	65	98.0	94.1	24.0	78.4	58.8	84.3	94.1	90.2	19.6	35.3	10.0
16	Little Rock	45	97.1	94.1	55.9	94.1	91.2	82.4	94.1	82.4	23.5	55.9	29.4
16	New Orleans	52	90.9	100.0	17.4	60.9	47.8	91.3	95.7	69.6	26.1	8.7	
17	Dallas	86	93.9	90.9	42.4	72.7	50.0	71.2	90.9	83.3	42.4	42.4	19.7
19	Denver	80	95.6	97.1	47.8	80.9	64.7	58.8	86.8	75.0	25.0	42.6	10.3
19	Grand Junction	42	100.0	100.0	41.4	93.1	79.3	82.8	79.3	82.8	31.0	41.4	17.2
19	Salt Lake City	58	100.0	93.3	56.7	66.7	80.0	96.7	96.7	96.7	20.0	76.7	25.0
19	Southern Colorado	106	100.0	95.7	48.4	58.1	77.4	80.6	87.1	84.9	16.1	61.3	23.9
20	American Lake	48	100.0	100.0	**92.9**	95.2	95.2	59.5	95.2	71.4	19.0	33.3	4.8
20	Boise	40	92.0	96.0	44.0	88.0	70.8	72.0	80.0	52.0	16.0	40.0	
20	Portland	76	100.0	100.0	**82.7**	67.9	37.7	64.2	92.5	86.8	34.0	56.6	15.1
20	Seattle	39	100.0	91.3	34.8	60.9	69.6	78.3	100.0	78.3	8.7	30.4	
21	Palo Alto	42	100.0	97.2	61.1	94.4	91.7	83.3	75.0	75.0	52.8	94.4	5.6
21	San Francisco	43	97.4	97.4	**76.3**	86.8	15.8	86.8	92.1	92.1	31.6	36.8	7.9
22	Greater Los Angeles	49	96.2	100.0	**92.3**	100.0	96.2	96.2	92.3	96.2	23.1	84.6	42.3
23	Iowa City	48	97.1	94.1	29.4	73.5	32.4	61.8	58.8	41.2	17.6	20.6	8.8
23	Knoxville	100	100.0	100.0	29.2	91.0	57.3	69.7	74.2	86.5	43.8	38.2	21.3
23	Minneapolis	70	97.6	95.1	58.5	97.6	22.0	53.7	90.2	61.0	22.0	58.5	19.5
23	Omaha	25	90.9	100.0	18.2	90.9	81.8	54.5	100.0	90.9	45.5	9.1	
23	St. Cloud	38	96.6	100.0	24.1	75.9	34.5	58.6	58.6	44.8	17.2	24.1	10.3
	ALL SITES	4108	96.8	95.9	48.2	80.4	64.2	67.4	82.0	74.6	31.0	50.5	20.0
	SITE AVERAGE	65.2	96.5	95.7	49.9	80.8	64.5	69.0	82.3	74.3	31.5	49.6	20.2
	SITE STD. DEV.	30.2	4.8	5.8	20.6	16.2	24.1	16.0	15.3	17.3	17.9	21.1	14.5

Shaded values do not meet the threshold level (25%) for the minimum standard. Bold/Underlined values represent positive outliers. Source: Client Interview

TABLE 2-16. CLIENT RATED THERAPEUTIC ALLIANCE

6 Month Pre-Entry vs. Follow-up

VISN	SITE	1 Pre-Entry N	2 Pre-Entry Mean	3 Follow-up Mean (2+4)	4 Change at Follow-up	5 Percent Change (4/2)
1	Bedford	110	38.30	44.84	6.54	17.1%
1	Brockton	22	36.11	39.88	3.77	10.4%
1	Togus	22	33.24	38.91	5.67	17.1%
1	West Haven	20	37.63	45.19	7.56	20.1%
2	Albany	17	40.53	48.52	7.99	19.7%
2	Buffalo	42	39.13	47.01	7.88	20.1%
2	Canandaigua	51	34.06	33.03	-1.03	-3.0%
2	Syracuse	25	36.60	44.81	8.21	22.4%
3	Brooklyn	34	34.31	39.27	4.95	14.4%
3	Montrose	50	32.27	32.26	-0.01	0.0%
3	New Jersey	60	33.05	32.42	-0.63	-1.9%
3	Northport	17	33.75	38.75	5.00	14.8%
4	Coatesville	69	35.16	39.51	4.35	12.4%
4	Pittsburgh	105	36.00	39.95	3.96	11.0%
5	Baltimore	28	33.96	38.45	4.49	13.2%
5	Perry Point	64	35.32	40.93	5.62	15.9%
5	Washington, DC	16	39.83	43.00	3.17	8.0%
6	Hampton	31	35.19	43.84	8.65	24.6%
6	Salem	29	36.79	40.78	3.98	10.8%
6	Salisbury	19	39.47	42.25	2.78	7.0%
7	Atlanta	29	35.03	42.29	7.25	20.7%
7	Augusta	76	36.41	38.58	2.17	6.0%
7	Tuscaloosa	29	41.00	40.55	-0.44	-1.1%
7	Tuskegee	48	33.05	33.70	0.66	2.0%
8	Gainesville	47	34.70	37.12	2.42	7.0%
8	Miami	10	36.60	40.16	3.56	9.7%
10	Chillicothe	51	37.93	41.58	3.65	9.6%
10	Cincinnati	50	38.01	43.94	5.94	15.6%
10	Cleveland	96	36.88	40.24	3.36	9.1%
10	Columbus	20	36.26	39.26	3.00	8.3%
10	Dayton	47	39.12	45.99	6.88	17.6%
10	Youngstown	30	39.53	46.07	6.54	16.5%
11	Ann Arbor	35	36.31	41.86	5.55	15.3%
11	Battle Creek	50	36.70	39.82	3.13	8.5%
11	Detroit	55	33.88	36.54	2.66	7.9%
11	Northern Indiana	23	35.78	36.57	0.78	2.2%
12	Chicago-West Side	41	36.81	38.13	1.32	3.6%
12	Madison	46	36.29	35.75	-0.54	-1.5%
12	Milwaukee	25	31.99	30.31	-1.69	-5.3%
12	North Chicago	105	35.59	36.60	1.01	2.8%
12	Tomah	9	36.74	33.95	-2.79	-7.6%
15	St. Louis	26	31.99	39.07	7.08	22.1%
16	Gulf Coast	36	35.05	40.22	5.17	14.8%
16	Houston	55	37.17	38.09	0.92	2.5%
16	Little Rock	33	35.92	41.52	5.59	15.6%
16	New Orleans	20	29.35	36.46	7.11	24.2%
17	Dallas	78	36.59	40.63	4.04	11.0%
19	Denver	69	37.68	43.15	5.47	14.5%
19	Grand Junction	34	38.96	43.15	4.19	10.8%
19	Salt Lake City	47	35.93	38.17	2.24	6.2%
19	Southern Colorado	89	35.16	36.10	0.94	2.7%
20	American Lake	29	33.46	38.28	4.82	14.4%
20	Boise	38	36.71	41.34	4.64	12.6%
20	Portland	31	35.95	40.00	4.05	11.3%
20	Seattle	30	37.31	39.82	2.51	6.7%
21	Palo Alto	36	29.40	30.47	1.06	3.6%
21	San Francisco	33	36.82	36.94	0.13	0.3%
22	Greater Los Angeles	36	34.55	38.55	4.01	11.6%
23	Iowa City	39	34.65	40.38	5.73	16.5%
23	Knoxville	88	35.47	37.64	2.16	6.1%
23	Minneapolis	62	32.41	35.90	3.49	10.8%
23	Omaha	15	39.85	50.61	10.76	27.0%
23	St. Cloud	32	35.30	34.82	-0.49	-1.4%
ALL SITES		2709	35.85	39.55	3.70	10.31%
SITE AVERAGE		43.00	35.89	39.59	3.70	10.24%
SITE STD. DEV.		24.23	2.42	4.12	2.84	7.84%

Change values are least squares means derived from analysis of covariance including site,time, baseline value, and eleven other baseline covariates

Shaded values represent significant t-test differences, in the undesired direction, between LS means for the indicated site and the median site on this variable.

Bold/Underlined values represent positive outliers

Source: Client Interview

TABLE 2-17. FIDELITY TO ASSERTIVE COMMUNITY TREATMENT MODEL.

VISN	SITE	HUMAN RESOURCES	ORGANIZ'L BOUNDARIES	SERVICES	SUB. ABUSE TX	TOTAL SCORE	AVG SCORE
1	Bedford	4.2	4.1	4.2	5.0	94.0	**4.30**
1	Brockton	4.3	4.7	4.3	3.0	94.0	**4.30**
1	Togus	4.7	4.6	3.7	2.0	88.0	4.00
1	West Haven	4.5	4.7	4.8	3.7	100.0	**4.50**
2	Albany	4.0	4.3	3.7	4.0	88.0	4.00
2	Buffalo	3.8	4.4	4.2	1.7	84.0	3.80
2	Canandaigua	3.5	4.1	3.3	3.3	80.0	3.60
2	Syracuse	4.0	4.1	3.2	1.3	76.0	3.50
3	Brooklyn	3.3	4.3	2.8	2.7	75.0	3.40
3	Montrose	3.5	4.9	4.0	1.0	82.0	3.70
3	New Jersey	4.5	3.9	4.0	2.7	86.0	3.90
3	Northport	3.0	4.9	4.3	2.7	86.0	3.90
4	Coatesville	3.0	4.9	3.2	4.3	84.0	3.80
4	Pittsburgh	4.3	4.9	3.7	2.3	89.0	4.00
5	Baltimore	4.7	4.1	3.8	2.3	87.0	4.00
5	Perry Point	4.0	5.0	4.7	3.3	97.0	**4.40**
5	Washington, DC	4.3	5.0	4.0	2.3	92.0	4.20
6	Hampton	3.8	4.4	4.0	4.3	91.0	4.10
6	Salem	4.0	4.6	3.8	2.3	86.0	3.90
6	Salisbury	4.5	3.9	3.8	2.3	84.0	3.80
7	Atlanta	4.2	4.4	3.3	3.3	86.0	3.90
7	Augusta	4.3	4.6	4.2	5.0	98.0	**4.50**
7	Tuscaloosa	4.4	4.9	4.0	3.0	91.0	4.10
7	Tuskegee	4.0	5.0	4.2	2.0	89.0	4.00
8	Gainesville	4.2	4.1	4.2	3.3	89.0	4.00
8	Miami	4.3	4.4	4.0	2.3	88.0	4.00
10	Chillicothe	3.7	4.7	3.7	2.7	85.0	3.90
10	Cincinnati	4.5	4.3	3.8	3.7	91.0	4.10
10	Cleveland	4.3	5.0	3.8	2.7	92.0	4.20
10	Columbus	3.0	3.4	4.0	3.0	73.0	3.30
10	Dayton	3.7	4.3	3.5	2.7	81.0	3.70
10	Youngstown	4.3	4.9	4.2	3.3	95.0	**4.30**
11	Ann Arbor	4.8	4.0	3.7	3.0	94.0	**4.30**
11	Battle Creek	3.7	5.0	4.3	2.3	90.0	4.10
11	Detroit	4.3	3.7	3.2	2.0	77.0	3.50
11	Northern Indiana	4.0	3.9	4.2	2.7	84.0	3.80
12	Chicago-West Side	4.3	4.1	4.0	3.0	88.0	4.00
12	Madison	4.5	4.9	4.5	5.0	103.0	**4.70**
12	Milwaukee	4.5	4.1	4.7	3.0	93.0	4.20
12	North Chicago	4.0	4.6	3.7	2.3	85.0	3.90
12	Tomah	4.8	4.1	4.2	3.7	94.0	**4.30**
15	St. Louis	4.7	4.9	3.8	4.0	97.0	**4.40**
16	Gulf Coast	4.2	4.1	3.5	2.7	83.0	3.80
16	Houston	4.3	5.0	3.8	2.7	92.0	4.20
16	Little Rock	4.5	4.6	4.7	4.3	100.0	**4.50**
16	New Orleans	4.8	4.7	2.8	3.0	88.0	4.00
17	Dallas	3.2	4.1	3.7	2.7	78.0	3.50
19	Denver	4.5	4.9	4.3	3.3	97.0	**4.40**
19	Grand Junction	4.2	4.6	3.7	4.7	93.0	4.20
19	Salt Lake City	3.5	4.1	3.8	4.0	85.0	3.90
19	Southern Colorado	4.2	4.3	3.7	1.0	80.0	3.60
20	American Lake	4.2	4.7	4.2	2.7	91.0	4.10
20	Boise	4.5	4.7	4.2	3.7	96.0	**4.40**
20	Portland	3.7	4.4	2.8	2.3	77.0	3.50
20	Seattle	3.8	4.9	3.3	2.3	84.0	3.80
21	Palo Alto	3.2	4.1	4.0	3.0	81.0	3.70
21	San Francisco	4.3	4.7	3.8	3.0	91.0	4.10
22	Greater Los Angeles	4.0	4.4	3.0	3.0	82.0	3.70
23	Iowa City	3.8	4.6	4.3	2.7	89.0	4.00
23	Knoxville	4.3	4.4	4.3	2.0	89.0	4.00
23	Minneapolis	4.3	4.9	4.2	2.7	93.0	4.20
23	Omaha	4.8	3.6	3.5	1.7	80.0	3.60
23	St. Cloud	3.8	4.3	3.8	4.0	88.0	4.00
	SITE AVERAGE	4.10	4.5	3.9	3.0	88.0	4.0
	SITE STD. DEV.	0.46	0.4	0.5	0.9	6.5	0.30

Source: Assertive Community Treatment Fidelity Scale from the FY 2003 Annual Progress Report
Total score range: 22-110
Shaded values exceed one standard deviation from the mean in undesired direction.

TABLE 2-18. VA HOSPITAL USE 183 DAYS PRE -vs- POST-ENTRY PTF FY03

VISN SITE	Total N FY03	1 N 183 Days	2 Pre-IDF MH Days/ Veteran	3 Post-IDF MH Days/ Veteran	4 Change MH Days/ Veteran (col.3-2)	5 % Change MH Days (4/2)	6 Change MH Cost*/ Inp't Veteran (4x$893)
1 Bedford	154	128	34.1	21.5	-12.6	-36.8%	($11,211)
1 Brockton	69	43	104.1	11.4	**-92.7**	**-89.0%**	($82,758)
1 Togus	25	22	64.6	28.5	-36.1	-55.9%	($32,270)
1 West Haven	59	27	70.6	26.8	-43.8	-62.0%	($39,094)
2 Albany	46	28	27.3	9.3	-18.0	-65.8%	($16,042)
2 Buffalo	74	61	14.2	7.9	-6.3	-44.5%	($5,651)
2 Canandaigua	117	83	62.5	6.7	-55.8	**-89.4%**	($49,868)
2 Syracuse	52	40	30.3	11.2	-19.2	-63.1%	($17,101)
3 Brooklyn	57	53	49.1	19.9	-29.2	-59.4%	($26,032)
3 Montrose	111	87	138.7	18.1	**-120.6**	**-87.0%**	($107,694)
3 New Jersey	90	82	28.5	11.5	-17.0	-59.6%	($15,159)
3 Northport ~	114	103	30.1	14.8	-15.3	-50.7%	($13,620)
4 Coatesville	83	75	76.0	14.2	**-61.7**	**-81.3%**	($55,128)
4 Pittsburgh	129	114	63.5	13.7	-49.8	-78.4%	($44,439)
5 Baltimore	34	23	68.0	20.7	-47.3	-69.5%	($42,204)
5 Perry Point	97	96	131.1	13.4	**-117.8**	**-89.8%**	($105,151)
5 Washington, DC	24	21	18.7	11.7	-7.0	-37.5%	($6,251)
6 Hampton ~	64	56	21.0	8.8	-12.1	-57.9%	($10,844)
6 Salem ~	42	33	16.5	5.2	-11.3	-68.7%	($10,094)
6 Salisbury ~	35	30	93.8	22.9	**-70.9**	-75.6%	($63,314)
7 Atlanta ~	57	57	28.7	9.9	-18.8	-65.4%	($16,763)
7 Augusta	77	71	122.0	16.4	**-105.5**	**-86.5%**	($94,230)
7 Tuscaloosa ~	70	60	73.5	17.3	-56.2	-76.5%	($50,216)
7 Tuskegee	66	61	28.4	13.5	-14.9	-52.6%	($13,322)
8 Gainesville	63	60	33.0	6.2	-26.9	**-81.4%**	($23,992)
8 Miami	54	52	38.0	18.2	-19.7	-52.0%	($17,620)
10 Chillicothe	62	55	50.1	21.9	-28.2	-56.4%	($25,215)
10 Cincinnati	62	57	23.9	9.6	-14.3	-60.0%	($12,784)
10 Cleveland	141	128	46.3	14.7	-31.6	-68.3%	($28,234)
10 Columbus	25	20	26.4	10.2	-16.2	-61.4%	($14,467)
10 Dayton	51	46	13.7	9.2	-4.5	-32.8%	($4,019)
10 Youngstown	41	39	8.2	2.3	-5.9	-71.6%	($5,244)
11 Ann Arbor	49	49	35.6	10.0	-25.6	-72.0%	($22,872)
11 Battle Creek	78	71	76.6	20.2	-56.4	-73.7%	($50,398)
11 Detroit	103	99	36.5	14.8	-21.8	-59.6%	($19,448)
11 Northern Indiana ~	73	57	27.5	17.7	-9.8	-35.6%	($8,758)
12 Chicago-West Side	73	70	43.6	13.4	-30.2	-69.2%	($26,943)
12 Madison	47	42	31.8	7.2	-24.7	-77.5%	($22,027)
12 Milwaukee	26	23	5.9	3.0	-2.9	-49.6%	($2,601)
12 North Chicago	132	126	60.8	9.5	-51.3	**-84.4%**	($45,834)
12 Tomah	41	39	6.9	2.4	-4.5	-65.3%	($4,053)
15 St. Louis	32	18	20.8	10.2	-10.6	-50.8%	($9,426)
16 Gulf Coast	57	50	44.8	18.1	-26.7	-59.7%	($23,879)
16 Houston	65	55	22.5	8.1	-14.4	-64.1%	($12,875)
16 Little Rock	45	39	39.0	26.5	-12.5	-32.0%	($11,151)
16 New Orleans	52	40	22.8	10.8	-12.0	-52.6%	($10,694)
17 Dallas	86	78	41.4	14.3	-27.1	-65.5%	($24,203)
19 Denver	80	78	53.8	19.5	-34.3	-63.8%	($30,648)
19 Grand Junction	42	37	14.7	4.7	-10.0	-68.1%	($8,954)
19 Salt Lake City	58	55	20.3	10.5	-9.7	-47.9%	($8,670)
19 Southern Colorado	106	104	9.2	1.9	-7.3	-79.6%	($6,552)
20 American Lake	48	45	71.8	13.1	**-58.6**	**-81.7%**	($52,369)
20 Boise	40	38	13.4	8.5	-4.9	-36.9%	($4,418)
20 Portland	76	70	37.3	12.8	-24.6	-65.8%	($21,955)
20 Seattle	39	36	23.3	3.8	-19.4	**-83.5%**	($17,364)
21 Palo Alto	42	36	45.9	18.4	-27.5	-59.8%	($24,533)
21 San Francisco	43	42	35.4	6.6	-28.8	**-81.4%**	($25,727)
22 Greater Los Angeles	49	47	65.8	29.4	-36.3	-55.3%	($32,452)
23 Iowa City	48	35	26.9	18.0	-8.9	-33.0%	($7,935)
23 Knoxville	100	94	17.0	4.7	-12.3	-72.6%	($11,001)
23 Minneapolis	70	68	64.6	4.6	**-59.9**	**-92.8%**	($53,514)
23 Omaha	25	13	14.2	3.5	-10.7	-75.5%	($9,548)
23 St. Cloud	38	33	21.6	14.6	-7.0	-32.4%	($6,251)
ALL SITES	**4108**	**3598**	**46.3**	**12.9**	**-33.4**	**-72.1%**	**($29,830)**
SITE AVERAGE	**65.2**	**57**	**42.6**	**12.8**	**-29.8**	**-63.9%**	**($26,620)**
SITE STD. DEV.	**30.0**	**28**	**29.5**	**6.6**	**26.8**	**16.0%**	**$23,922**

~ Includes "grandfathered" veterans from pre-existing CM program.

*FY 2003 National general psychiatry per diem=$893(NMHPPMS).
Total N FY03=IDF3 Table <10/01/03 (including terminated clients)

Shaded values exceed one standard deviation from the mean in undesired direction. Bold /Underlined values represent positive outliers.

Source: VA automated Patient Treatment File FY03; NMHPPMS FY03

TABLE 2-18a. VA HOSPITAL USE 365 DAYS PRE -vs- POST-ENTRY PTF FY03

VISN	SITE	Total N FY03	1 N 365 Days	2 Pre-IDF MH Days/ Veteran	3 Post-IDF MH Days/ Veteran	4 Change MH Days/ Veteran (col.3-2)	5 % Change MH Days/ (4/2)	6 Change MH Cost*/ Inp't Veteran (4x$893)
1	Bedford	154	104	55.2	33.8	-21.3	-38.7%	($19,036)
1	Brockton	69	43	191.7	25.7	**-165.9**	**-86.6%**	($148,155)
1	Togus	25	21	108.7	39.6	-69.1	-63.6%	($61,745)
1	West Haven	59	25	110.9	45.9	-65.0	-58.6%	($58,045)
2	Albany	46	25	41.0	13.4	-27.6	-67.3%	($24,647)
2	Buffalo	74	54	16.8	17.7	**0.9**	**5.5%**	$827
2	Canandaigua	117	82	113.6	10.9	**-102.7**	**-90.4%**	($91,729)
2	Syracuse	52	36	37.0	22.0	-15.0	-40.5%	($13,370)
3	Brooklyn	57	53	64.6	36.1	-28.5	-44.1%	($25,459)
3	Montrose	111	83	252.6	39.1	**-213.5**	**-84.5%**	($190,650)
3	New Jersey	90	78	62.3	21.8	-40.5	-65.1%	($36,189)
3	Northport	114	97	59.7	27.9	-31.9	-53.3%	($28,447)
4	Coatesville	83	69	129.8	25.6	**-104.2**	**-80.3%**	($93,092)
4	Pittsburgh	129	104	97.1	25.8	-71.3	-73.4%	($63,678)
5	Baltimore	34	15	118.7	48.1	-70.7	-59.5%	($63,105)
5	Perry Point	97	88	224.9	25.5	**-199.4**	**-88.7%**	($178,082)
5	Washington, DC	24	10	47.3	23.7	-23.6	-49.9%	($21,075)
6	Hampton	64	40	42.4	13.5	-28.9	-68.1%	($25,785)
6	Salem	42	31	33.9	14.8	-19.1	-56.2%	($17,025)
6	Salisbury	35	28	173.1	39.6	**-133.5**	-77.1%	($119,184)
7	Atlanta	57	57	35.9	15.7	-20.2	-56.3%	($18,048)
7	Augusta	77	68	200.1	25.7	**-174.4**	**-87.2%**	($155,710)
7	Tuscaloosa	70	43	112.7	39.9	-72.7	-64.6%	($64,940)
7	Tuskegee	66	55	47.9	24.1	-23.7	-49.6%	($21,188)
8	Gainesville	63	56	50.4	13.4	-37.1	-73.5%	($33,105)
8	Miami	54	46	56.3	29.1	-27.3	-48.4%	($24,344)
10	Chillicothe	62	50	88.9	37.4	-51.5	-58.0%	($45,990)
10	Cincinnati	62	53	32.0	19.7	-12.4	-38.6%	($11,053)
10	Cleveland	141	112	77.7	24.1	-53.6	-69.0%	($47,855)
10	Columbus	25	16	40.3	17.1	-23.2	-57.6%	($20,706)
10	Dayton	51	42	17.8	16.1	-1.6	**-9.1%**	($1,446)
10	Youngstown	41	35	10.5	6.5	-4.1	-38.5%	($3,623)
11	Ann Arbor	49	45	61.4	21.2	-40.2	-65.5%	($35,938)
11	Battle Creek	78	61	138.6	42.1	**-96.5**	-69.6%	($86,196)
11	Detroit	103	87	55.0	22.0	-33.0	-60.1%	($29,500)
11	Northern Indiana	73	56	64.9	41.7	-23.2	**-35.8%**	($20,746)
12	Chicago-West Side	73	65	66.8	24.7	-42.0	-62.9%	($37,520)
12	Madison	47	39	51.2	9.6	-41.5	**-81.2%**	($37,094)
12	Milwaukee	26	21	11.8	8.7	-3.1	**-26.2%**	($2,764)
12	North Chicago	132	114	93.1	18.4	-74.8	**-80.3%**	($66,764)
12	Tomah	41	27	7.9	5.3	-2.6	**-33.3%**	($2,348)
16	Gulf Coast	57	33	83.6	38.4	-45.2	-54.1%	($40,374)
16	Houston	65	50	30.0	12.0	-18.0	-59.9%	($16,056)
16	Little Rock	45	33	63.6	64.2	**0.6**	**1.0%**	$568
16	New Orleans	52	29	28.2	20.7	-7.5	**-26.7%**	($6,713)
17	Dallas	86	65	55.4	17.4	-38.0	-68.6%	($33,948)
19	Denver	80	69	73.6	32.1	-41.6	-56.5%	($37,118)
19	Grand Junction	42	33	22.6	10.1	-12.5	-55.5%	($11,203)
19	Salt Lake City	58	55	38.2	14.7	-23.5	-61.6%	($21,026)
19	Southern Colorado	106	102	14.5	5.7	-8.8	-60.9%	($7,871)
20	American Lake	48	42	95.7	21.7	-73.9	-77.3%	($66,018)
20	Boise	40	37	23.2	11.9	-11.3	-48.8%	($10,113)
20	Portland	76	61	47.8	18.2	-29.6	-61.9%	($26,424)
20	Seattle	39	35	39.7	12.9	-26.9	-67.6%	($23,983)
21	Palo Alto	42	33	75.4	27.6	-47.8	-63.4%	($42,729)
21	San Francisco	43	41	53.0	8.0	-45.0	**-84.9%**	($40,207)
22	Greater Los Angeles	49	45	95.5	40.3	-55.2	-57.8%	($49,313)
23	Iowa City	48	19	39.5	28.9	-10.5	**-26.7%**	($9,400)
23	Knoxville	100	82	35.7	9.7	-26.0	-72.8%	($23,196)
23	Minneapolis	70	65	94.6	6.8	-87.8	**-92.9%**	($78,419)
23	St. Cloud	38	27	36.4	24.5	-11.9	**-32.7%**	($10,617)
ALL SITES		4051	3190	77.3	23.1	-54.2	-70.1%	($48,427)
SITE AVERAGE		66.4	52.3	71.3	23.6	-47.7	-58.0%	($42,602)
SITE STD. DEV.		29.9	25.8	51.9	12.3	47.5	21.0%	$42,055

*FY 2003 National general psychiatry per diem=$893(NMHPPMS).
Total N FY03=IDF3 Table <10/01/03 (including terminated)
Shaded values exceed one standard deviation from the mean in undesired direction. Bold /Underlined values represent positive outliers.

Source: VA automated Patient Treatment File FY03; NMHPPMS FY03

TABLE 2-18b. VA HOSPITAL USE 548 DAYS PRE -vs- POST-ENTRY PTF FY03

VISN	SITE	Total N FY03	1 N 548 Days	2 Pre-IDF MH Days/ Veteran	3 Post-IDF MH Days/ Veteran	4 Change MH Days/ Veteran (col.3-2)	5 % Change MH Days/ (4/2)	6 Change MH Cost*/ Inp't Veteran (4x$893)
1	Bedford	154	94	79.7	40.8	-38.8	-48.7%	($34,675)
1	Brockton	69	42	272.4	39.6	**-232.8**	**-85.5%**	($207,878)
1	Togus	25	21	144.6	57.8	-86.8	-60.0%	($77,521)
1	West Haven	59	24	143.7	54.2	-89.5	-62.3%	($79,961)
2	Albany	46	24	48.3	16.1	-32.2	-66.7%	($28,762)
2	Buffalo	74	45	22.3	14.7	-7.6	-34.1%	($6,787)
2	Canandaigua	117	74	166.1	14.5	**-151.6**	**-91.3%**	($135,386)
2	Syracuse	52	32	41.1	27.7	-13.4	-32.7%	($12,000)
3	Brooklyn	57	50	85.1	53.5	-31.6	-37.2%	($28,255)
3	Montrose	111	78	371.1	65.6	**-305.4**	**-82.3%**	($272,743)
3	New Jersey	90	73	99.0	29.5	-69.5	-70.2%	($62,094)
3	Northport	114	92	100.9	41.7	-59.1	-58.6%	($52,794)
4	Coatesville	83	62	187.6	28.0	**-159.6**	**-85.1%**	($142,563)
4	Pittsburgh	129	92	129.7	39.0	-90.7	-69.9%	($81,011)
5	Perry Point	97	78	319.9	42.3	**-277.6**	**-86.8%**	($247,911)
6	Salem	42	20	58.9	26.2	-32.7	-55.5%	($29,201)
6	Salisbury	35	21	273.6	75.9	**-197.7**	-72.3%	($176,559)
7	Atlanta	57	37	63.0	30.4	-32.6	-51.8%	($29,155)
7	Augusta	77	63	279.0	33.5	**-245.5**	**-88.0%**	($219,239)
7	Tuscaloosa	70	30	152.2	55.9	-96.3	-63.3%	($85,966)
7	Tuskegee	66	42	71.4	31.5	-39.9	-55.9%	($35,614)
8	Gainesville	63	55	68.0	16.7	-51.2	-75.4%	($45,754)
8	Miami	54	43	75.2	39.5	-35.7	-47.4%	($31,836)
10	Chillicothe	62	45	138.5	47.1	-91.4	-66.0%	($81,620)
10	Cincinnati	62	47	38.8	26.5	-12.3	-31.7%	($11,001)
10	Cleveland	141	100	113.6	34.1	-79.5	-70.0%	($70,994)
10	Columbus	25	14	66.8	26.6	-40.1	-60.1%	($35,848)
10	Dayton	51	37	21.7	24.3	2.6	12.0%	$2,317
10	Youngstown	41	35	20.2	7.0	-13.2	-65.5%	($11,813)
11	Ann Arbor	49	44	77.0	27.0	-50.0	-64.9%	($44,670)
11	Battle Creek	78	47	215.7	67.0	**-148.7**	-68.9%	($132,772)
11	Detroit	103	77	73.2	23.1	-50.1	-68.4%	($44,696)
11	Northern Indiana	73	43	82.0	70.0	-11.9	-14.6%	($10,654)
12	Chicago-West Side	73	58	86.0	36.2	-49.8	-57.9%	($44,496)
12	Madison	47	36	73.4	16.7	-56.8	-77.3%	($50,678)
12	Milwaukee	26	17	22.8	5.8	-16.9	-74.4%	($15,128)
12	North Chicago	132	112	123.2	27.5	-95.7	-77.7%	($85,465)
16	Gulf Coast	57	15	76.8	58.9	-17.9	-23.3%	($15,955)
16	Houston	65	46	46.7	14.7	-31.9	-68.4%	($28,498)
16	Little Rock	45	29	79.8	62.1	-17.7	-22.2%	($15,797)
16	New Orleans	52	14	25.1	13.6	-11.4	-45.6%	($10,206)
17	Dallas	86	59	66.9	22.0	-44.9	-67.1%	($40,094)
19	Denver	80	66	89.0	44.6	-44.5	-49.9%	($39,711)
19	Grand Junction	42	30	26.5	14.0	-12.5	-47.1%	($11,163)
19	Salt Lake City	58	48	62.7	16.9	-45.8	-73.0%	($40,855)
19	Southern Colorado	106	90	14.8	6.2	-8.6	-58.4%	($7,719)
20	American Lake	48	40	122.3	27.9	-94.4	-77.2%	($84,277)
20	Boise	40	35	34.6	15.0	-19.6	-56.7%	($17,503)
20	Portland	76	58	54.7	25.2	-29.6	-54.0%	($26,390)
20	Seattle	39	33	47.3	22.7	-24.5	-51.9%	($21,919)
21	Palo Alto	42	15	131.0	39.3	-91.7	-70.0%	($81,858)
21	San Francisco	43	31	64.0	9.6	-54.4	**-85.0%**	($48,568)
22	Greater Los Angeles	49	43	125.9	48.4	-77.5	-61.6%	($69,218)
23	Knoxville	100	66	51.5	12.7	-38.9	-75.4%	($34,719)
23	Minneapolis	70	57	126.5	10.6	-115.9	**-91.6%**	($103,494)
23	St. Cloud	38	20	54.5	38.4	-16.2	-29.6%	($14,422)
ALL SITES		3840	2699	111.1	32.1	-79.0	-71.1%	($70,528)
SITE AVERAGE		68.6	48.2	101.9	32.4	-69.5	-60.3%	($62,028)
SITE STD. DEV.		29.8	24.1	77.4	17.7	68.8	20.4%	$61,482

*FY 2003 National general psychiatry per diem=$893(NMHPPMS).
Total N FY03=IDF3 Table <10/01/03 (including terminated)
Shaded values exceed one standard deviation from the mean in undesired direction. Bold /Underlined values represent positive outliers.

Source: VA automated Patient Treatment File FY03; NMHPPMS FY03

TABLE 2-18c. VA HOSPITAL USE 730 DAYS PRE -vs- POST-ENTRY PTF FY03

VISN	SITE	Total N FY03	1 N 730 Days	2 Pre-IDF MH Days/ Veteran	3 Post-IDF MH Days/ Veteran	4 Change MH Days/ Veteran (col.3-2)	5 % Change MH Days/ (4/2)	6 Change MH Cost*/ Inp't Veteran (4x$893)
1	Bedford	154	83	101.7	49.1	-52.6	-51.7%	($46,931)
1	Brockton	69	41	351.0	51.7	**-299.3**	**-85.3%**	($267,290)
1	Togus	25	19	199.0	69.1	-129.9	-65.3%	($116,043)
1	West Haven	59	24	162.7	69.3	-93.4	-57.4%	($83,384)
2	Albany	46	23	56.4	18.1	-38.3	-67.9%	($34,206)
2	Buffalo	74	42	25.2	13.3	-11.9	-47.1%	($10,588)
2	Canandaigua	117	69	238.6	20.1	**-218.4**	**-91.6%**	($195,075)
2	Syracuse	52	31	45.2	28.8	-16.4	-36.3%	($14,662)
3	Brooklyn	57	46	102.4	62.5	-39.9	-39.0%	($35,642)
3	Montrose	111	70	492.4	91.3	**-401.1**	-81.5%	($358,170)
3	New Jersey	90	67	130.8	34.4	-96.4	-73.7%	($86,128)
4	Coatesville	83	61	230.4	35.0	**-195.4**	**-84.8%**	($174,486)
4	Pittsburgh	129	84	153.5	44.3	-109.2	-71.1%	($97,507)
5	Perry Point	97	72	423.5	56.7	**-366.9**	**-86.6%**	($327,619)
6	Salisbury	35	18	335.7	110.4	**-225.3**	-67.1%	($201,223)
7	Atlanta	57	37	73.5	35.4	-38.2	-51.9%	($34,079)
7	Augusta	77	62	352.2	43.2	**-309.0**	**-87.7%**	($275,937)
7	Tuskegee	66	36	92.5	40.4	-52.2	-56.4%	($46,585)
8	Gainesville	63	55	76.9	19.7	-57.1	-74.3%	($51,031)
8	Miami	54	40	88.8	50.8	-38.0	-42.8%	($33,934)
10	Chillicothe	62	43	180.8	55.1	-125.7	-69.5%	($112,269)
10	Cincinnati	62	41	43.3	30.1	-13.2	-30.6%	($11,827)
10	Cleveland	141	85	144.0	47.4	-96.6	-67.1%	($86,243)
10	Columbus	25	14	75.6	31.1	-44.5	-58.9%	($39,739)
10	Dayton	51	35	28.4	30.7	2.3	8.2%	$2,092
10	Youngstown	41	29	31.2	10.2	-21.1	-67.4%	($18,815)
11	Ann Arbor	49	41	104.6	30.0	-74.6	-71.3%	($66,583)
11	Battle Creek	78	46	261.1	94.1	-167.0	-64.0%	($149,150)
11	Detroit	103	75	91.4	29.1	-62.3	-68.2%	($55,652)
12	Chicago-West Side	73	51	100.6	45.6	-54.9	-54.6%	($49,062)
12	Madison	47	29	90.1	32.3	-57.8	-64.2%	($51,609)
12	Milwaukee	26	14	26.2	10.0	-16.2	-61.9%	($14,479)
12	North Chicago	132	110	153.0	34.4	-118.6	-77.5%	($105,894)
16	Houston	65	36	45.4	13.9	-31.5	-69.3%	($28,105)
16	Little Rock	45	18	96.7	64.5	-32.2	-33.3%	($28,774)
17	Dallas	86	54	81.7	27.0	-54.7	-67.0%	($48,850)
19	Denver	80	61	97.3	52.8	-44.6	-45.8%	($39,790)
19	Grand Junction	42	27	29.0	19.7	-9.3	-32.0%	($8,269)
19	Salt Lake City	58	37	73.0	20.7	-52.4	-71.7%	($46,750)
19	Southern Colorado	106	83	16.2	9.1	-7.1	-43.7%	($6,326)
20	American Lake	48	39	131.3	30.0	-101.3	-77.2%	($90,468)
20	Boise	40	30	46.0	20.2	-25.8	-56.0%	($23,010)
20	Portland	76	52	63.8	32.0	-31.8	-49.9%	($28,439)
20	Seattle	39	31	61.5	28.3	-33.2	-54.0%	($29,642)
21	San Francisco	43	31	69.0	10.4	-58.6	**-85.0%**	($52,370)
22	Greater Los Angeles	49	42	154.6	59.5	-95.2	-61.6%	($85,005)
23	Knoxville	100	49	72.0	12.0	-60.1	**-83.4%**	($53,635)
23	Minneapolis	70	53	151.0	14.5	-136.5	**-90.4%**	($121,920)
23	St. Cloud	38	13	61.8	68.1	6.2	10.1%	$5,564
ALL SITES		3390	2249	143.3	39.0	-104.4	-72.8%	($93,202)
SITE AVERAGE		69.2	46	128.8	38.9	-89.9	-60.7%	($80,317)
SITE STD. DEV.		30.9	22	107.4	23.1	94.2	21.6%	$84,153

*FY 2003 National general psychiatry per diem=$893(NMHPPMS).
Total N FY03=IDF3 Table <10/01/03(including terminated)

Shaded values exceed one standard deviation from the mean in undesired direction. Bold /Underlined values represent positive outliers.

Source: VA automated Patient Treatment File FY03; NMHPI

TABLE 2-19. BRIEF PSYCHIATRIC RATING SCALE

Pre-Entry vs. Follow-up

VISN	SITE	1 Pre-Entry N	2 Pre-Entry Mean	3 Follow-up Mean (2 + 4)	4 Change at Follow-up	5 Percent Change (4 / 2)
1	Bedford	150	36.25	28.05	-8.20	-22.61%
1	Brockton	35	39.60	30.75	-8.85	-22.35%
1	Togus	23	33.65	22.56	-11.09	-32.96%
1	West Haven	25	41.19	39.26	-1.93	-4.69%
2	Albany	19	49.16	50.29	1.13	2.31%
2	Buffalo	51	36.67	29.41	-7.25	-19.78%
2	Canandaigua	62	39.53	43.51	3.98	10.07%
2	Syracuse	41	43.54	42.35	-1.19	-2.73%
3	Brooklyn	57	44.20	48.72	4.52	10.23%
3	Montrose	74	48.64	53.64	5.00	10.28%
3	New Jersey	87	41.68	35.78	-5.90	-14.16%
3	Northport	25	43.52	47.10	3.58	8.22%
4	Coatesville	83	42.89	40.38	-2.51	-5.85%
4	Pittsburgh	126	35.60	28.68	-6.91	-19.42%
5	Baltimore	34	45.57	46.76	1.19	2.62%
5	Perry Point	96	46.78	41.53	-5.25	-11.22%
5	Washington, DC	18	49.78	48.12	-1.66	-3.33%
6	Hampton	33	43.27	36.68	-6.59	-15.24%
6	Salem	31	37.90	32.33	-5.57	-14.70%
6	Salisbury	30	40.30	49.69	9.39	23.30%
7	Atlanta	36	36.12	19.38	**-16.75**	**-46.36%**
7	Augusta	77	29.99	16.12	-13.87	-46.24%
7	Tuscaloosa	47	29.39	21.28	-8.11	-27.58%
7	Tuskegee	60	37.53	25.66	-11.88	-31.64%
8	Gainesville	63	49.84	38.83	-11.01	-22.09%
8	Miami	15	38.20	34.33	-3.87	-10.13%
10	Chillicothe	55	34.44	29.00	-5.44	-15.79%
10	Cincinnati	62	35.16	31.44	-3.73	-10.60%
10	Cleveland	137	36.50	34.03	-2.47	-6.77%
10	Columbus	24	36.73	28.12	-8.61	-23.43%
10	Dayton	49	29.32	15.88	-13.43	-45.82%
10	Youngstown	37	40.29	30.80	-9.49	-23.55%
11	Ann Arbor	49	42.79	31.70	-11.09	-25.92%
11	Battle Creek	74	37.51	35.50	-2.02	-5.38%
11	Detroit	97	33.25	21.68	-11.57	-34.80%
11	Northern Indiana	26	41.54	46.66	5.12	12.33%
12	Chicago-West Side	55	39.95	33.96	-6.00	-15.01%
12	Madison	46	36.43	34.90	-1.52	-4.18%
12	Milwaukee	26	51.23	59.84	8.61	16.80%
12	North Chicago	128	33.00	27.06	-5.94	-18.00%
12	Tomah	10	46.30	41.16	-5.14	-11.10%
15	St. Louis	31	63.35	62.72	-0.64	-1.01%
16	Gulf Coast	57	40.19	41.54	1.35	3.35%
16	Houston	65	42.95	41.28	-1.68	-3.91%
16	Little Rock	42	38.69	28.97	-9.72	-25.12%
16	New Orleans	49	49.58	51.01	1.43	2.88%
17	Dallas	86	36.86	25.08	-11.78	-31.96%
19	Denver	79	35.45	28.68	-6.77	-19.09%
19	Grand Junction	40	57.90	47.54	-10.36	-17.89%
19	Salt Lake City	55	53.36	59.93	6.57	12.31%
19	Southern Colorado	104	33.29	23.36	-9.93	-29.83%
20	American Lake	47	45.74	51.52	5.78	12.64%
20	Boise	39	36.46	29.86	-6.60	-18.11%
20	Portland	52	39.65	34.41	-5.24	-13.21%
20	Seattle	39	56.18	58.77	2.59	4.60%
21	Palo Alto	41	47.80	39.64	-8.16	-17.08%
21	San Francisco	42	44.18	43.06	-1.12	-2.54%
22	Greater Los Angeles	47	46.28	39.33	-6.95	-15.01%
23	Iowa City	46	43.15	35.38	-7.77	-18.00%
23	Knoxville	99	37.26	31.42	-5.84	-15.67%
23	Minneapolis	67	44.86	50.20	5.35	11.92%
23	Omaha	23	37.17	27.30	-9.88	-26.57%
23	St. Cloud	37	45.73	40.35	-5.38	-11.76%
ALL SITES		3460	40.18	34.89	-5.16	-12.83%
SITE AVERAGE		54.92	41.45	37.21	-4.24	-11.69%
SITE STD DEVIATION		30.52	6.84	11.05	6.01	15.82%

Change values are least squares means derived from analysis of covariance adjusted for site, time, baseline value, and eleven other baseline covariates

Shaded values represent significant t-test differences, in the undesired direction, between LS means for the indicated site and the median site on this variable.

Bold Underlined values represent positive outliers.

Source: Client Interviews

TABLE 2-20. SYMPTOM SEVERITY

Pre-Entry vs. Follow-up

VISN	SITE	1 Pre-Entry N	2 Pre-Entry Mean	3 Follow-up Mean (2 + 4)	4 Change at Follow-up	5 Percent Change (4 / 2)
1	Bedford	151	2.00	1.64	-0.36	-18.17%
1	Brockton	31	1.64	1.26	-0.38	-23.12%
1	Togus	22	1.89	1.36	-0.52	-27.68%
1	West Haven	25	1.99	1.65	-0.34	-17.06%
2	Albany	19	2.12	2.03	-0.08	-3.92%
2	Buffalo	49	2.09	1.82	-0.27	-12.99%
2	Canandaigua	61	1.89	1.80	-0.09	-4.71%
2	Syracuse	41	2.35	2.25	-0.11	-4.50%
3	Brooklyn	57	2.16	2.11	-0.05	-2.52%
3	Montrose	65	2.00	1.74	-0.26	-12.81%
3	New Jersey	81	2.08	1.75	-0.33	-15.75%
3	Northport	22	1.99	1.80	-0.18	-9.22%
4	Coatesville	81	2.01	1.86	-0.14	-7.10%
4	Pittsburgh	114	1.68	1.32	-0.36	-21.37%
5	Baltimore	33	2.04	2.37	0.34	16.52%
5	Perry Point	78	1.66	1.39	-0.26	-15.90%
5	Washington, DC	20	2.39	2.29	-0.10	-4.16%
6	Hampton	32	2.49	2.25	-0.24	-9.70%
6	Salem	30	2.11	1.95	-0.17	-7.87%
6	Salisbury	29	1.68	1.75	0.07	4.33%
7	Atlanta	34	2.24	2.14	-0.10	-4.59%
7	Augusta	77	1.86	1.54	-0.32	-17.15%
7	Tuscaloosa	43	1.59	1.16	-0.42	-26.78%
7	Tuskegee	60	2.21	2.30	0.09	4.14%
8	Gainesville	63	2.18	1.90	-0.28	-13.01%
8	Miami	15	1.88	1.67	-0.21	-11.30%
10	Chillicothe	55	1.75	1.52	-0.23	-13.10%
10	Cincinnati	62	2.13	1.88	-0.26	-11.98%
10	Cleveland	125	1.79	1.57	-0.22	-12.03%
10	Columbus	23	2.27	2.11	-0.16	-7.05%
10	Dayton	49	1.91	1.36	**-0.55**	**-28.79%**
10	Youngstown	37	1.95	1.51	-0.44	-22.79%
11	Ann Arbor	48	2.06	1.75	-0.31	-14.95%
11	Battle Creek	70	1.88	1.75	-0.12	-6.61%
11	Detroit	95	1.86	1.58	-0.28	-14.84%
11	Northern Indiana	23	1.91	1.92	0.01	0.29%
12	Chicago-West Side	56	1.99	1.53	-0.46	-23.18%
12	Madison	46	1.82	1.71	-0.11	-6.07%
12	Milwaukee	26	1.92	1.93	0.01	0.34%
12	North Chicago	123	1.82	1.43	-0.39	-21.32%
12	Tomah	10	1.66	1.54	-0.12	-7.22%
15	St. Louis	31	2.68	2.26	-0.42	-15.70%
16	Gulf Coast	56	2.15	2.25	0.10	4.70%
16	Houston	63	2.25	2.08	-0.17	-7.60%
16	Little Rock	40	2.05	1.89	-0.16	-7.67%
16	New Orleans	47	2.24	2.09	-0.14	-6.31%
17	Dallas	84	2.02	1.74	-0.28	-13.68%
19	Denver	78	1.90	1.71	-0.19	-9.93%
19	Grand Junction	40	2.53	2.31	-0.22	-8.71%
19	Salt Lake City	55	2.15	2.49	0.34	15.78%
19	Southern Colorado	99	1.92	1.67	-0.24	-12.56%
20	American Lake	41	2.07	2.08	0.01	0.68%
20	Boise	38	2.05	1.89	-0.16	-7.60%
20	Portland	40	1.96	2.01	0.05	2.60%
20	Seattle	38	2.43	2.39	-0.04	-1.53%
21	Palo Alto	39	2.08	1.84	-0.23	-11.30%
21	San Francisco	41	1.97	1.81	-0.16	-8.15%
22	Greater Los Angeles	41	2.23	1.88	-0.34	-15.39%
23	Iowa City	46	2.00	1.55	-0.45	-22.29%
23	Knoxville	97	1.88	1.75	-0.13	-6.95%
23	Minneapolis	65	2.02	1.78	-0.24	-12.03%
23	Omaha	23	2.02	1.65	-0.37	-18.43%
23	St. Cloud	35	2.28	2.05	-0.23	-9.87%
ALL SITES		3318	1.77	1.54	-0.23	-12.78%
SITE AVERAGE		52.67	2.03	1.83	-0.20	-9.96%
SITE STD DEVIATION		29.00	0.22	0.30	0.18	9.17%

Change values are least squares means derived from analysis of covariance adjusted for site, time, baseline value, and eleven other baseline covariates

Shaded values represent significant t-test differences, in the undesired direction, between LS means for the indicated site and the median site on this variable.
Bold/Underlined values represent positive outliers.
Source: Client Interviews

TABLE 2-21. GLOBAL ASSESSMENT OF FUNCTIONING

Pre-Entry vs. Follow-up

VISN	SITE	1 Pre-Entry N	2 Pre-Entry Mean	3 Follow-up Mean (2 + 4)	4 Change at Follow-up	5 Percent Change (4 / 2)
1	Bedford	149	41.24	40.27	-0.97	-2.36%
1	Brockton	35	31.57	25.53	-6.04	-19.13%
1	Togus	23	43.57	35.48	-8.09	-18.56%
1	West Haven	25	30.84	26.04	-4.80	-15.58%
2	Albany	19	35.05	32.52	-2.53	-7.21%
2	Buffalo	52	34.85	26.55	-8.30	-23.82%
2	Canandaigua	62	32.21	24.48	-7.73	-24.01%
2	Syracuse	41	40.20	46.00	**5.81**	**14.45%**
3	Brooklyn	57	38.82	45.27	**6.45**	**16.60%**
3	Montrose	74	39.47	37.47	-2.00	-5.07%
3	New Jersey	87	43.13	44.35	1.23	2.84%
3	Northport	24	44.00	49.22	5.22	11.87%
4	Coatesville	83	38.61	43.34	4.73	12.24%
4	Pittsburgh	125	37.32	41.80	4.48	12.01%
5	Baltimore	33	43.03	47.80	4.77	11.09%
5	Perry Point	96	39.04	35.43	-3.61	-9.25%
5	Washington, DC	18	40.50	35.75	-4.75	-11.72%
6	Hampton	33	40.73	47.78	**7.05**	**17.31%**
6	Salem	31	46.97	56.09	**9.13**	**19.43%**
6	Salisbury	30	40.77	42.63	1.86	4.57%
7	Atlanta	36	46.69	59.17	**12.47**	**26.72%**
7	Augusta	77	44.04	50.58	**6.54**	**14.86%**
7	Tuscaloosa	47	41.19	45.19	4.00	9.70%
7	Tuskegee	60	50.18	55.26	5.07	10.11%
8	Gainesville	63	42.06	41.63	-0.44	-1.04%
8	Miami	15	34.80	32.69	-2.11	-6.05%
10	Chillicothe	55	39.78	40.37	0.59	1.49%
10	Cincinnati	62	42.71	51.96	**9.25**	**21.67%**
10	Cleveland	139	35.47	35.03	-0.45	-1.26%
10	Columbus	24	44.13	50.72	**6.59**	**14.94%**
10	Dayton	49	49.22	53.43	4.20	8.54%
10	Youngstown	38	50.84	54.85	4.01	7.88%
11	Ann Arbor	49	35.57	33.24	-2.33	-6.55%
11	Battle Creek	75	46.89	54.69	**7.80**	**16.63%**
11	Detroit	98	43.37	51.09	**7.72**	**17.81%**
11	Northern Indiana	26	47.04	56.42	**9.39**	**19.95%**
12	Chicago-West Side	55	36.64	35.72	-0.92	-2.51%
12	Madison	46	43.59	41.65	-1.94	-4.44%
12	Milwaukee	26	43.65	45.74	2.09	4.79%
12	North Chicago	127	34.31	25.52	-8.79	-25.63%
12	Tomah	10	40.20	39.81	-0.39	-0.96%
15	St. Louis	25	37.32	48.11	**10.79**	**28.92%**
16	Gulf Coast	56	47.38	55.99	**8.62**	**18.19%**
16	Houston	64	40.31	44.12	3.81	9.45%
16	Little Rock	42	25.12	14.03	-11.09	-44.15%
16	New Orleans	50	33.56	37.43	3.87	11.53%
17	Dallas	86	39.17	40.03	0.86	2.19%
19	Denver	79	37.94	41.83	3.90	10.27%
19	Grand Junction	40	36.25	35.19	-1.06	-2.93%
19	Salt Lake City	55	33.75	25.74	-8.00	-23.71%
19	Southern Colorado	104	42.77	47.57	**4.80**	**11.22%**
20	American Lake	47	39.62	32.53	-7.09	-17.90%
20	Boise	39	40.62	37.87	-2.75	-6.76%
20	Portland	52	30.46	31.49	1.03	3.37%
20	Seattle	38	38.42	40.46	2.04	5.31%
21	Palo Alto	41	38.59	42.46	3.88	10.05%
21	San Francisco	43	36.14	43.70	**7.56**	**20.92%**
22	Greater Los Angeles	47	47.02	46.19	-0.83	-1.77%
23	Iowa City	46	24.87	22.77	-2.10	-8.45%
23	Knoxville	99	34.93	33.59	-1.34	-3.83%
23	Minneapolis	66	35.24	31.65	-3.60	-10.21%
23	Omaha	23	33.96	48.05	**14.09**	**41.49%**
23	St. Cloud	37	42.24	45.73	3.48	8.25%
ALL SITES		3453	39.39	40.29	1.04	2.63%
SITE AVERAGE		54.81	39.52	40.93	1.41	4.15%
SITE STD DEVIATION		30.60	5.50	9.71	5.66	15.29%

Change values are least squares means derived from analysis of covariance adjusted for site, time, baseline value, and eleven other baseline covariates

Shaded values represent significant t-test differences, in the undesired direction, between LS means for the indicated site and the median site on this variable.
Bold/Underlined values represent positive outliers.
Source: Client Interviews

TABLE 2-22. INSTRUMENTAL ACTIVITIES OF DAILY LIVING

Pre-Entry vs. Follow-up

VISN	SITE	1 Pre-Entry N	2 Pre-Entry Mean	3 Follow-up Mean (2 + 4)	4 Change at Follow-up	5 Percent Change (4 / 2)
1	Bedford	143	47.73	50.30	2.57	5.38%
1	Brockton	25	39.30	44.21	4.91	12.50%
1	Togus	22	44.48	46.65	2.17	4.87%
1	West Haven	18	44.42	48.23	3.81	8.58%
2	Albany	17	48.97	54.30	5.33	10.89%
2	Buffalo	48	41.44	43.34	1.90	4.58%
2	Canandaigua	39	43.10	38.18	-4.92	-11.42%
2	Syracuse	40	44.04	47.03	2.99	6.80%
3	Brooklyn	55	43.41	41.93	-1.49	-3.42%
3	Montrose	31	30.52	26.27	-4.25	-13.92%
3	New Jersey	62	41.06	39.21	-1.85	-4.50%
3	Northport	23	39.26	34.07	-5.19	-13.21%
4	Coatesville	72	41.17	42.29	1.12	2.72%
4	Pittsburgh	123	45.92	47.71	1.79	3.90%
5	Baltimore	26	39.93	40.29	0.36	0.90%
5	Perry Point	56	39.16	36.60	-2.56	-6.53%
5	Washington, DC	18	44.00	46.66	2.66	6.05%
6	Hampton	33	46.67	49.80	3.13	6.71%
6	Salem	24	49.87	55.51	5.64	11.31%
6	Salisbury	25	45.27	45.42	0.15	0.33%
7	Atlanta	31	43.37	45.21	1.84	4.24%
7	Augusta	52	43.85	41.01	-2.84	-6.48%
7	Tuscaloosa	31	41.27	42.09	0.82	1.98%
7	Tuskegee	60	37.94	41.23	3.29	8.68%
8	Gainesville	53	41.43	41.85	0.43	1.03%
8	Miami	14	45.59	47.45	1.86	4.08%
10	Chillicothe	27	48.88	55.81	6.93	14.18%
10	Cincinnati	61	46.62	50.12	3.50	7.50%
10	Cleveland	117	43.42	42.95	-0.47	-1.08%
10	Columbus	24	46.13	50.00	3.87	8.40%
10	Dayton	48	50.83	59.14	**8.31**	**16.36%**
10	Youngstown	29	45.71	48.60	2.89	6.33%
11	Ann Arbor	40	44.58	49.16	4.59	10.29%
11	Battle Creek	55	42.44	39.99	-2.45	-5.78%
11	Detroit	85	44.35	44.29	-0.06	-0.15%
11	Northern Indiana	23	44.34	43.03	-1.31	-2.95%
12	Chicago-West Side	55	41.44	41.19	-0.25	-0.60%
12	Madison	41	47.57	49.93	2.37	4.97%
12	Milwaukee	25	41.84	37.69	-4.15	-9.91%
12	North Chicago	84	46.47	51.29	4.82	10.37%
12	Tomah	9	49.89	50.65	0.76	1.53%
15	St. Louis	26	41.46	44.15	2.69	6.49%
16	Gulf Coast	57	46.54	50.72	4.18	8.98%
16	Houston	65	41.62	41.13	-0.49	-1.19%
16	Little Rock	33	38.60	35.76	-2.84	-7.35%
16	New Orleans	48	43.69	42.97	-0.72	-1.65%
17	Dallas	84	45.01	42.42	-2.59	-5.74%
19	Denver	70	45.31	50.59	**5.29**	**11.67%**
19	Grand Junction	39	44.55	42.96	-1.59	-3.57%
19	Salt Lake City	53	45.99	45.22	-0.77	-1.68%
19	Southern Colorado	64	45.50	47.91	2.41	5.30%
20	American Lake	42	43.99	44.09	0.09	0.21%
20	Boise	38	46.65	48.74	2.09	4.47%
20	Portland	42	38.14	39.84	1.70	4.47%
20	Seattle	37	39.64	39.22	-0.42	-1.07%
21	Palo Alto	40	32.18	26.67	-5.50	-17.11%
21	San Francisco	36	42.62	43.30	0.68	1.59%
22	Greater Los Angeles	42	42.90	47.23	4.33	10.09%
23	Iowa City	44	46.57	44.98	-1.59	-3.42%
23	Knoxville	90	45.21	48.63	3.42	7.56%
23	Minneapolis	53	44.78	49.49	4.71	10.51%
23	Omaha	23	42.43	45.46	3.02	7.12%
23	St. Cloud	28	48.79	53.25	4.46	9.15%

VISN	SITE	1 Pre-Entry N	2 Pre-Entry Mean	3 Follow-up Mean (2 + 4)	4 Change at Follow-up	5 Percent Change (4 / 2)
ALL SITES		2918	43.80	44.54	1.15	2.63%
SITE AVERAGE		46.32	43.65	44.85	1.20	2.39%
SITE STD DEVIATION		26.20	3.75	6.09	3.08	7.23%

Change values are least squares means derived from analysis of covariance adjusted for site, time, baseline value, and eleven other baseline covariates

Shaded values represent significant t-test differences, in the undesired direction, between LS means for the indicated sit and the median site on this variable. Bold/Underlined values represent positive outliers.

Source: Client Interviews

TABLE 2-23. QUALITY OF LIFE

Pre-Entry vs. Follow-up

VISN	SITE	1 Pre-Entry N	2 Pre-Entry Mean	3 Follow-up Mean (2 + 4)	4 Change at Follow-up	5 Percent Change (4 / 2)
1	Bedford	137	24.69	28.70	4.01	16.24%
1	Brockton	30	27.61	28.92	1.31	4.75%
1	Togus	22	26.96	31.09	4.13	15.31%
1	West Haven	25	24.16	30.00	**5.84**	**24.16%**
2	Albany	15	25.13	28.76	3.62	14.41%
2	Buffalo	46	25.46	29.23	3.78	14.84%
2	Canandaigua	56	26.65	27.50	0.84	3.17%
2	Syracuse	40	22.65	24.67	2.02	8.90%
3	Brooklyn	56	25.15	25.70	0.56	2.21%
3	Montrose	68	24.75	26.13	1.38	5.57%
3	New Jersey	79	24.94	26.44	1.50	6.01%
3	Northport	23	25.98	29.67	3.68	14.18%
4	Coatesville	78	25.26	27.85	2.60	10.28%
4	Pittsburgh	112	27.11	29.50	2.39	8.81%
5	Baltimore	30	25.35	22.88	-2.47	-9.75%
5	Perry Point	85	28.03	31.72	3.69	13.17%
5	Washington, DC	15	26.16	28.26	2.10	8.04%
6	Hampton	30	24.44	28.14	3.70	15.12%
6	Salem	29	24.33	27.56	3.23	13.25%
6	Salisbury	26	27.95	29.79	1.83	6.56%
7	Atlanta	34	26.26	28.18	1.92	7.32%
7	Augusta	75	27.30	30.60	3.30	12.10%
7	Tuscaloosa	42	29.37	33.68	4.31	14.66%
7	Tuskegee	59	26.80	28.82	2.02	7.53%
8	Gainesville	61	25.54	28.29	2.75	10.77%
8	Miami	10	26.88	30.67	3.79	14.09%
10	Chillicothe	55	26.21	29.15	2.94	11.23%
10	Cincinnati	53	25.22	27.92	2.69	10.67%
10	Cleveland	118	26.66	29.56	2.89	10.86%
10	Columbus	23	27.30	30.64	3.34	12.22%
10	Dayton	48	26.35	29.47	3.13	11.86%
10	Youngstown	33	27.64	31.77	4.13	14.96%
11	Ann Arbor	45	25.52	31.33	**5.80**	**22.73%**
11	Battle Creek	69	27.23	29.35	2.11	7.76%
11	Detroit	90	27.43	29.43	1.99	7.27%
11	Northern Indiana	21	27.83	28.91	1.08	3.90%
12	Chicago-West Side	52	26.05	27.40	1.35	5.18%
12	Madison	43	27.23	30.33	3.10	11.39%
12	Milwaukee	23	27.91	28.96	1.05	3.76%
12	North Chicago	125	25.33	28.01	2.68	10.58%
12	Tomah	8	27.60	31.72	4.12	14.93%
15	St. Louis	28	22.41	28.57	6.16	27.47%
16	Gulf Coast	52	25.55	25.93	0.38	1.48%
16	Houston	58	24.23	27.09	2.86	11.81%
16	Little Rock	39	24.62	25.23	0.62	2.51%
16	New Orleans	46	26.69	30.06	3.37	12.63%
17	Dallas	82	26.21	28.18	1.97	7.54%
19	Denver	71	26.93	28.68	1.75	6.50%
19	Grand Junction	37	25.17	27.25	2.07	8.23%
19	Salt Lake City	51	25.11	22.90	-2.21	-8.80%
19	Southern Colorado	89	27.72	29.73	2.01	7.24%
20	American Lake	46	25.02	28.48	3.46	13.81%
20	Boise	37	27.45	29.13	1.68	6.11%
20	Portland	35	25.37	28.19	2.83	11.15%
20	Seattle	37	23.69	25.86	2.17	9.15%
21	Palo Alto	37	24.45	25.20	0.75	3.07%
21	San Francisco	37	24.25	25.01	0.76	3.15%
22	Greater Los Angeles	45	23.39	24.85	1.46	6.24%
23	Iowa City	43	27.55	32.68	5.13	18.63%
23	Knoxville	90	26.63	28.71	2.08	7.80%
23	Minneapolis	65	26.32	27.51	1.19	4.51%
23	Omaha	20	27.66	33.14	5.48	19.81%
23	St. Cloud	33	26.18	30.28	4.10	15.65%
ALL SITES		3167	26.03	28.85	2.54	9.76%
SITE AVERAGE		50.27	26.02	28.56	2.54	9.79%
SITE STD DEVIATION		28.07	1.43	2.25	1.63	6.41%

Change values are least squares means derived from analysis of covariance adjusted for site, time, baseline value, and eleven other baseline covariates

Shaded values represent significant t-test differences, in the undesired direction, between LS means for the indicated site and the median site on this variable.

Bold/Underlined values represent positive outliers.

Source: Client Interviews

TABLE 2-23a. HOUSING INDEPENDENCE

Pre-Entry vs. Follow-up

VISN	SITE	1 Pre-Entry N	2 Pre-Entry Mean	3 Follow-up Mean (2 + 4)	4 Change at Follow-up	5 Percent Change (4 / 2)
1	Bedford	149	2.60	2.94	0.34	13.00%
1	Brockton	35	2.36	2.81	0.44	18.81%
1	Togus	23	3.02	3.38	0.36	11.94%
1	West Haven	24	2.54	2.46	-0.08	-2.98%
2	Albany	19	3.19	3.59	0.39	12.25%
2	Buffalo	52	3.46	4.20	0.74	21.34%
2	Canandaigua	62	3.03	3.23	0.20	6.73%
2	Syracuse	41	3.27	3.94	0.66	20.23%
3	Brooklyn	57	3.60	4.29	0.69	19.23%
3	Montrose	74	2.04	2.35	0.31	15.38%
3	New Jersey	87	2.91	3.41	0.50	17.03%
3	Northport	23	2.47	2.34	-0.13	-5.27%
4	Coatesville	78	2.51	2.70	0.18	7.33%
4	Pittsburgh	116	3.18	3.89	**0.71**	**22.47%**
5	Baltimore	31	2.48	2.59	0.11	4.58%
5	Perry Point	90	2.16	2.05	-0.11	-5.25%
5	Washington, DC	18	2.80	3.75	0.95	34.05%
6	Hampton	33	3.27	3.77	0.50	15.44%
6	Salem	31	3.09	3.74	0.65	21.03%
6	Salisbury	30	2.44	2.53	0.09	3.48%
7	Atlanta	36	3.28	3.93	0.65	19.82%
7	Augusta	77	2.27	2.68	0.41	18.09%
7	Tuscaloosa	47	2.93	3.35	0.42	14.18%
7	Tuskegee	60	3.72	4.52	0.80	21.60%
8	Gainesville	62	3.27	3.70	0.43	13.09%
8	Miami	15	3.27	3.70	0.43	13.24%
10	Chillicothe	55	1.95	2.41	0.46	23.44%
10	Cincinnati	61	3.09	3.66	0.57	18.48%
10	Cleveland	136	2.87	3.29	0.42	14.73%
10	Columbus	23	3.56	4.24	0.69	19.36%
10	Dayton	46	3.44	3.91	0.47	13.60%
10	Youngstown	38	3.27	3.90	0.64	19.55%
11	Ann Arbor	49	3.19	3.76	0.57	17.84%
11	Battle Creek	75	2.81	2.98	0.17	5.99%
11	Detroit	98	2.79	3.20	0.41	14.88%
11	Northern Indiana	26	2.71	3.00	0.29	10.57%
12	Chicago-West Side	54	3.10	3.56	0.46	14.98%
12	Madison	46	2.83	3.35	0.52	18.37%
12	Milwaukee	26	3.58	3.96	0.38	10.47%
12	North Chicago	125	2.55	2.38	-0.17	-6.53%
12	Tomah	9	3.64	4.57	0.94	25.77%
15	St. Louis	30	2.86	3.39	0.53	18.73%
16	Gulf Coast	57	2.85	3.52	0.68	23.77%
16	Houston	65	3.08	3.60	0.52	16.73%
16	Little Rock	36	2.77	2.55	-0.22	-7.90%
16	New Orleans	50	2.89	3.73	**0.85**	**29.30%**
17	Dallas	85	3.38	4.08	0.70	20.72%
19	Denver	79	2.93	3.20	0.27	9.20%
19	Grand Junction	39	3.32	3.96	0.64	19.44%
19	Salt Lake City	55	3.29	3.27	-0.02	-0.51%
19	Southern Colorado	104	3.30	3.80	0.50	15.12%
20	American Lake	43	2.79	3.13	0.34	12.15%
20	Boise	37	3.33	3.70	0.37	11.12%
20	Portland	52	3.36	3.87	0.52	15.33%
20	Seattle	39	3.09	3.44	0.35	11.30%
21	Palo Alto	38	2.09	2.12	0.04	1.78%
21	San Francisco	43	2.87	3.29	0.42	14.48%
22	Greater Los Angeles	45	2.96	3.06	0.10	3.49%
23	Iowa City	46	3.35	3.96	0.62	18.45%
23	Knoxville	99	2.91	3.53	0.62	21.11%
23	Minneapolis	67	3.25	3.68	0.43	13.25%
23	Omaha	22	3.40	3.97	0.57	16.73%
23	St. Cloud	35	3.38	3.67	0.30	8.79%
	ALL SITES	3403	2.94	3.33	0.41	13.89%
	SITE AVERAGE	54.02	2.98	3.41	0.42	13.73%
	SITE STD DEVIATION	30.06	0.41	0.60	0.26	8.53%

Change values are least squares means derived from analysis of covariance adjusted for site, time, baseline value, and eleven other baseline covariates

Shaded values represent significant t-test differences, in the undesired direction, between LS means for the indicated site and the median site on this variable.

Bold/Underlined values represent positive outliers.

Source: Client Interviews

TABLE 2-24. VA MENTAL HEALTH SERVICE SATISFACTION

Pre-Entry vs. Follow-up

VISN	SITE	1 Pre-Entry N	2 Pre-Entry Mean	3 Follow-up Mean (2 + 4)	4 Change at Follow-up	5 Percent Change (4 / 2)
1	Bedford	145	9.39	10.95	1.56	16.63%
1	Brockton	29	8.62	9.27	0.65	7.52%
1	Togus	20	8.65	9.29	0.64	7.44%
1	West Haven	21	8.43	9.87	1.44	17.07%
2	Albany	18	10.28	11.62	1.34	13.02%
2	Buffalo	44	10.64	12.22	1.59	14.92%
2	Canandaigua	57	9.81	10.03	0.22	2.25%
2	Syracuse	40	9.58	10.56	0.99	10.34%
3	Brooklyn	47	8.34	9.29	0.95	11.43%
3	Montrose	64	8.59	9.10	0.51	5.92%
3	New Jersey	84	8.94	9.83	0.89	9.99%
3	Northport	21	9.48	10.54	1.06	11.19%
4	Coatesville	76	8.64	9.75	1.11	12.81%
4	Pittsburgh	111	9.21	10.43	1.23	13.32%
5	Baltimore	32	8.84	8.58	-0.27	-3.00%
5	Perry Point	74	9.39	10.45	1.06	11.27%
5	Washington, DC	16	9.94	10.13	0.19	1.91%
6	Hampton	32	9.97	12.11	**2.15**	**21.52%**
6	Salem	30	8.90	9.43	0.53	5.91%
6	Salisbury	27	9.30	9.86	0.56	6.05%
7	Atlanta	32	8.66	10.13	1.48	17.08%
7	Augusta	74	8.88	10.07	1.19	13.39%
7	Tuscaloosa	40	9.73	11.01	1.29	13.26%
7	Tuskegee	60	9.83	10.20	0.37	3.72%
8	Gainesville	58	8.10	9.45	1.34	16.56%
8	Miami	15	10.27	10.94	0.67	6.52%
10	Chillicothe	54	7.70	8.59	0.89	11.55%
10	Cincinnati	56	10.38	10.76	0.39	3.74%
10	Cleveland	116	9.76	11.40	1.64	16.84%
10	Columbus	23	9.26	9.97	0.71	7.69%
10	Dayton	48	10.21	10.65	0.44	4.35%
10	Youngstown	36	10.17	11.39	1.23	12.06%
11	Ann Arbor	40	8.25	9.87	1.62	19.63%
11	Battle Creek	64	8.67	8.97	0.30	3.48%
11	Detroit	86	10.10	11.05	0.94	9.35%
11	Northern Indiana	22	9.36	8.86	-0.50	-5.33%
12	Chicago-West Side	55	9.25	9.11	-0.15	-1.59%
12	Madison	41	9.68	10.17	0.49	5.02%
12	Milwaukee	26	10.27	11.03	0.77	7.46%
12	North Chicago	112	9.17	10.29	1.12	12.25%
12	Tomah	9	9.56	9.70	0.15	1.52%
15	St. Louis	26	9.12	10.10	0.99	10.82%
16	Gulf Coast	55	9.44	10.82	1.38	14.65%
16	Houston	57	10.25	11.11	0.86	8.41%
16	Little Rock	39	9.72	11.03	1.31	13.49%
16	New Orleans	41	10.17	11.49	1.32	13.00%
17	Dallas	82	9.23	10.48	1.25	13.50%
19	Denver	76	8.84	9.76	0.92	10.41%
19	Grand Junction	37	11.32	12.64	1.31	11.59%
19	Salt Lake City	51	9.27	9.74	0.47	5.02%
19	Southern Colorado	88	10.51	11.80	1.29	12.30%
20	American Lake	37	8.68	9.55	0.88	10.13%
20	Boise	38	9.21	10.59	1.38	14.94%
20	Portland	40	9.83	11.47	1.64	16.70%
20	Seattle	35	9.14	10.62	1.48	16.19%
21	Palo Alto	37	9.35	9.73	0.38	4.04%
21	San Francisco	38	9.26	10.05	0.79	8.52%
22	Greater Los Angeles	40	8.45	8.31	-0.14	-1.70%
23	Iowa City	42	9.81	11.70	1.89	19.28%
23	Knoxville	94	9.63	10.09	0.46	4.77%
23	Minneapolis	61	8.30	9.65	1.35	16.30%
23	Omaha	22	10.14	11.50	1.37	13.49%
23	St. Cloud	34	9.35	11.07	1.72	18.40%
	ALL SITES	3125	9.36	10.29	1.00	10.70%
	SITE AVERAGE	49.60	9.38	10.32	0.94	10.01%
	SITE STD DEVIATION	27.53	0.71	0.94	0.55	5.90%

Change values are least squares means derived from analysis of covariance adjusted for site, time, baseline value, and eleven other baseline covariate

Shaded values represent significant t-test differences, in the undesired direction, between LS means for the indicated site and the median site on this variable.

Bold/Underlined values represent positive outliers.

Source: Client Interviews

TABLE 2-25. SATISFACTION WITH VA MHICM SERVICES

Pre-Entry vs. Follow-up

VISN	SITE	1 Pre-Entry N	2 Pre-Entry Mean	3 Follow-up Mean (2 + 4)	4 Change at Follow-up	5 Percent Change (4 / 2)
1	Bedford	144	2.97	3.70	0.72	24.34%
1	Brockton	30	3.03	3.42	0.39	12.79%
1	Togus	23	2.87	3.70	0.83	28.84%
1	West Haven	23	2.17	2.99	0.82	37.54%
2	Albany	19	2.84	3.55	0.71	25.03%
2	Buffalo	44	3.45	4.18	0.72	20.87%
2	Canandaigua	59	3.19	3.55	0.37	11.49%
2	Syracuse	41	3.20	3.95	0.75	23.51%
3	Brooklyn	50	2.48	2.86	0.38	15.35%
3	Montrose	59	3.15	3.70	0.54	17.25%
3	New Jersey	82	3.09	3.59	0.50	16.33%
3	Northport	21	3.48	4.10	0.63	18.00%
4	Coatesville	81	3.10	3.79	0.69	22.41%
4	Pittsburgh	109	3.05	3.71	0.66	21.83%
5	Baltimore	32	2.72	3.10	0.38	13.99%
5	Perry Point	75	3.27	3.83	0.56	17.10%
5	Washington, DC	18	3.50	4.23	0.73	20.82%
6	Hampton	33	2.97	3.79	0.82	27.70%
6	Salem	30	3.17	4.00	0.83	26.24%
6	Salisbury	29	3.34	3.94	0.59	17.79%
7	Atlanta	32	2.78	3.44	0.65	23.54%
7	Augusta	71	3.41	4.02	0.61	17.80%
7	Tuscaloosa	44	3.16	3.79	0.63	19.83%
7	Tuskegee	60	3.40	4.04	0.64	18.69%
8	Gainesville	53	2.75	3.60	0.84	30.64%
8	Miami	14	3.29	3.94	0.65	19.80%
10	Chillicothe	54	2.93	3.63	0.71	24.17%
10	Cincinnati	56	3.41	4.01	0.60	17.54%
10	Cleveland	126	3.17	3.83	0.65	20.50%
10	Columbus	23	2.91	3.59	0.68	23.34%
10	Dayton	49	3.47	3.90	0.43	12.50%
10	Youngstown	36	3.58	4.23	0.64	17.92%
11	Ann Arbor	41	2.85	3.37	0.52	18.27%
11	Battle Creek	66	3.11	3.60	0.49	15.77%
11	Detroit	91	3.10	3.74	0.64	20.74%
11	Northern Indiana	24	3.21	2.80	-0.41	-12.67%
12	Chicago-West Side	55	3.45	4.09	0.63	18.35%
12	Madison	41	3.32	3.52	0.20	6.02%
12	Milwaukee	26	3.65	4.26	0.60	16.53%
12	North Chicago	122	3.07	3.73	0.66	21.45%
12	Tomah	10	3.00	3.19	0.19	6.35%
15	St. Louis	29	2.79	3.69	0.89	31.94%
16	Gulf Coast	56	2.63	3.34	0.72	27.27%
16	Houston	65	3.22	3.80	0.59	18.20%
16	Little Rock	39	2.97	3.74	0.77	25.87%
16	New Orleans	47	3.40	4.18	0.77	22.69%
17	Dallas	74	3.31	4.17	0.86	26.03%
19	Denver	73	2.99	3.64	0.65	21.84%
19	Grand Junction	39	3.49	4.30	0.82	23.45%
19	Salt Lake City	52	3.13	3.75	0.62	19.69%
19	Southern Colorado	98	3.34	4.00	0.66	19.93%
20	American Lake	40	3.03	3.71	0.69	22.75%
20	Boise	39	3.28	3.68	0.40	12.25%
20	Portland	44	2.80	3.40	0.61	21.72%
20	Seattle	35	3.26	3.94	0.68	20.95%
21	Palo Alto	41	2.56	2.60	0.03	1.35%
21	San Francisco	38	3.13	3.53	0.40	12.70%
22	Greater Los Angeles	41	2.85	3.31	0.46	15.97%
23	Iowa City	44	3.05	3.58	0.54	17.70%
23	Knoxville	94	2.93	3.48	0.56	19.10%
23	Minneapolis	66	2.91	3.55	0.64	21.99%
23	Omaha	23	3.48	4.35	0.87	25.11%
23	St. Cloud	35	3.11	3.90	0.78	25.12%
ALL SITES		3208	3.11	3.72	0.62	19.89%
SITE AVERAGE		50.92	3.11	3.71	0.60	19.52%
SITE STD DEVIATION		28.04	0.29	0.36	0.21	7.31%

Change values are least squares means derived from analysis of covariance adjusted for site, time, baseline value, and eleven other baseline covariate
Shaded values represent significant t-test differences, in the undesired direction, between LS means for the indicated site and the median site on this variable.
Bold/Underlined values represent positive outliers.
Source: Client Interviews

TABLE 2-26. MHICM UNIT COSTS(Based on FY 2003 Expenditures)

VISN	SITE	FY 03 TOTAL EXPENDIT.	TOTAL VETS	COST PER VETERAN	FY 03 P/S EXPEND.	FY 03 FILLED FTE	COST PER FTE	ADJUSTED TOTAL VISITS PER VET/YR	TOTAL VISITS PER SITE/YR	COST PER VISIT
1	BEDFORD	$935,520	154	$6,075	$919,993	11.90	$77,310	126.60	19497	$48
1	BROCKTON	$301,920	69	$4,376	$295,092	3.80	$77,656	36.64	2528	$119
1	TOGUS	$275,463	25	$11,019	$260,693	3.45	$75,563	66.77	1669	$165
1	WEST HAVEN	$496,976	59	$8,423	$473,257	6.43	$73,601	76.50	4514	$110
2	ALBANY	$312,347	46	$6,790	$311,596	3.70	$84,215	89.76	4129	$76
2	BUFFALO	$333,870	74	$4,512	$323,355	6.40	$50,524	47.03	3481	$96
2	CANANDAIGUA	$403,840	117	$3,452	$397,012	8.80	$45,115	98.52	11527	$35
2	SYRACUSE	$180,857	52	$3,478	$180,857	2.75	$65,766	39.62	2060	$88
3	BROOKLYN	$311,987	57	$5,473	$301,975	4.00	$75,494	31.78	1811	$172
3	MONTROSE	$805,815	111	$7,260	$798,850	8.10	$98,623	58.88	6536	$123
3	NEW JERSEY	$588,653	90	$6,541	$562,641	7.90	$71,220	43.79	3941	$149
3	NORTHPORT	$631,418	114	$5,539	$601,865	7.10	$84,770	69.58	7932	$80
4	COATESVILLE	$420,966	83	$5,072	$415,866	6.30	$66,010	46.28	3841	$110
4	PITTSBURGH	$600,757	129	$4,657	$596,464	8.10	$73,638	44.02	5679	$106
5	BALTIMORE	$344,382	34	$10,129	$329,499	5.20	$63,365	50.01	1700	$203
5	PERRY POINT	$429,320	97	$4,426	$404,961	7.10	$57,037	64.58	6264	$69
5	WASHINGTON, DC	$310,095	24	$12,921	$295,061	2.50	$118,024	99.04	2377	$130
6	HAMPTON	$341,414	64	$5,335	$319,021	3.50	$91,149	82.32	5269	$65
6	SALEM	$329,815	42	$7,853	$329,815	4.55	$72,487	48.75	2047	$161
6	SALISBURY	$274,212	35	$7,835	$267,612	3.20	$83,629	66.67	2333	$118
7	ATLANTA	$430,617	57	$7,555	$415,132	6.20	$66,957	83.54	4762	$90
7	AUGUSTA	$406,763	77	$5,283	$382,763	5.50	$69,593	79.24	6101	$67
7	TUSCALOOSA	$560,341	70	$8,005	$541,543	7.60	$71,256	89.11	6237	$90
7	TUSKEGEE	$310,272	66	$4,701	$286,657	5.00	$57,331	64.55	4260	$73
8	GAINESVILLE	$457,089	63	$7,255	$409,435	5.20	$78,738	63.36	3992	$115
8	MIAMI	$337,164	54	$6,244	$314,298	5.25	$59,866	94.46	5101	$66
10	CHILLICOTHE	$554,304	62	$8,940	$535,093	5.10	$104,920	71.20	4415	$126
10	CINCINNATI	$355,737	62	$5,738	$326,409	4.90	$66,614	52.82	3275	$109
10	CLEVELAND	$1,137,038	141	$8,064	$1,096,482	15.00	$73,099	83.32	11749	$97
10	COLUMBUS	$212,430	25	$8,497	$187,666	2.66	$70,551	76.26	1906	$111
10	DAYTON	$314,662	51	$6,170	$309,062	4.50	$68,680	58.01	2959	$106
10	YOUNGSTOWN	$390,110	41	$9,515	$379,479	5.00	$75,896	97.10	3981	$98
11	ANN ARBOR	$372,353	49	$7,599	$327,612	5.20	$63,002	82.65	4050	$92
11	BATTLE CREEK	$392,068	78	$5,027	$371,638	5.20	$71,469	65.36	5098	$77
11	DETROIT	$412,362	103	$4,004	$405,862	7.93	$51,181	37.73	3886	$106
11	NORTHERN INDIANA	$383,910	73	$5,259	$372,474	8.20	$45,424	77.77	5677	$68
12	CHICAGO-West Side	$418,688	73	$5,735	$400,108	5.75	$69,584	68.37	4991	$84
12	MADISON	$391,277	47	$8,325	$343,146	4.63	$74,114	210.40	9889	$40
12	MILWAUKEE	$359,654	26	$13,833	$340,628	3.95	$86,235	96.00	2496	$144
12	NORTH CHICAGO	$822,085	132	$6,228	$789,966	11.50	$68,693	118.96	15703	$52
12	TOMAH	$272,789	41	$6,653	$259,438	4.75	$54,619	149.87	6145	$44
15	ST. LOUIS	$307,824	32	$9,620	$290,123	5.00	$58,025	73.05	2338	$132
16	GULF COAST	$339,660	57	$5,959	$330,739	4.20	$78,747	101.08	5761	$59
16	HOUSTON	$533,621	65	$8,210	$515,860	6.00	$85,977	54.94	3571	$149
16	LITTLE ROCK	$349,617	45	$7,769	$323,641	3.75	$86,304	89.17	4013	$87
16	NEW ORLEANS	$405,597	52	$7,800	$397,012	4.88	$81,355	41.40	2153	$188

VISN	SITE	FY 03 TOTAL EXPENDIT.	TOTAL VETS	COST PER VETERAN	FY 03 P/S EXPEND.	FY 03 FILLED FTE	COST PER FTE	ADJUSTED TOTAL VISITS PER VET/YR	TOTAL VISITS PER SITE/YR	COST PER VISIT
17	DALLAS	$455,464	86	$5,296	$430,028	7.00	$61,433	74.68	6422	$71
19	DENVER	$477,958	80	$5,974	$476,737	6.50	$73,344	45.04	3604	$133
19	GRAND JUNCTION	$238,885	42	$5,688	$238,885	4.40	$54,292	84.03	3529	$68
19	SALT LAKE CITY	$379,456	58	$6,542	$371,823	4.85	$76,665	46.63	2704	$140
19	SOUTHERN COLORADO	$667,463	106	$6,297	$480,938	6.25	$76,950	52.47	5562	$120
20	AMERICAN LAKE	$351,783	48	$7,329	$349,783	4.90	$71,384	57.40	2755	$128
20	BOISE	$382,497	40	$9,562	$379,497	4.10	$92,560	24.53	981	$390
20	PORTLAND	$577,297	76	$7,596	$555,306	6.60	$84,137	73.07	5553	$104
20	SEATTLE	$288,749	39	$7,404	$286,749	3.30	$86,894	80.71	3148	$92
21	PALO ALTO	$342,212	42	$8,148	$333,812	4.20	$79,479	54.68	2296	$149
21	SAN FRANCISCO	$360,951	43	$8,394	$337,670	3.70	$91,262	58.96	2535	$142
22	Greater Los Angeles	$414,285	49	$8,455	$395,045	4.00	$98,761	16.42	804	$515
23	IOWA CITY	$310,017	48	$6,459	$276,281	5.15	$53,647	40.41	1940	$160
23	KNOXVILLE	$564,460	100	$5,645	$531,650	8.60	$61,820	58.22	5822	$97
23	MINNEAPOLIS	$420,805	70	$6,012	$406,495	6.20	$65,564	55.12	3859	$109
23	OMAHA	$338,678	25	$13,547	$325,156	5.00	$65,031	88.68	2217	$153
23	ST. CLOUD	$308,832	38	$8,127	$290,302	3.60	$80,639	43.99	1672	$185
ALL SITES		$26,737,450	4108	$6,509	$25,503,909	355.97	$71,646	70.27	288,676	$93
SITE AVERAGE		$424,403.98	65.21	$7,073	$404,824	5.65	$73,290	70.19	4,588	$118
SITE STD. DEV.		$167,727.85	29.96	$2,168	$161,820	2.24	$13,948	30.21	3,246	$72

*Expenditures include space rental.
~MHICM teams (N=9) with insufficient data to be included in this Report: Albuquerque, Fayetteville NC, Fort Harrison, Mountain Home, Phoenix, Sheridan, Tampa, Topeka, Waco.

Source: MHICM Local Progress Reports FY 2003

TABLE 2-27. SITE PERFORMANCE ON MHICM CRITICAL MONITORS

		MONITORING DOMAIN				Total Team	Total Applicable	% Outliers/ Applicable
VISN	SITE	STRUCTURE	CLIENT	PROCESS	OUTCOME	Outliers	Monitors	Monitors
1	Bedford	0	0	1	0	1	17	5.9%
1	Brockton	5	0	1	0	6	17	35.3%
1	Togus	1	0	0	0	1	17	5.9%
1	West Haven	1	0	0	0	1	17	5.9%
2	Albany	2	0	0	0	2	17	11.8%
2	Buffalo	0	1	3	1	5	17	29.4%
2	Canandaigua	1	0	0	1	2	17	11.8%
2	Syracuse	3	0	2	0	5	17	29.4%
3	Brooklyn	2	0	2	0	4	17	23.5%
3	Montrose	0	0	2	1	3	17	17.6%
3	New Jersey	1	0	1	0	2	16	12.5%
3	Northport	1	0	0	0	1	17	5.9%
4	Coatesville	1	0	1	0	2	17	11.8%
4	Pittsburgh	1	0	1	0	2	17	11.8%
5	Baltimore	0	0	1	1	2	17	11.8%
5	Perry Point	2	0	0	0	2	17	11.8%
5	Washington, DC	2	1	0	0	3	17	17.6%
6	Hampton	3	0	1	0	4	17	23.5%
6	Salem	2	0	2	0	4	17	23.5%
6	Salisbury	2	0	1	1	4	17	23.5%
7	Atlanta	1	0	1	0	2	17	11.8%
7	Augusta	2	0	0	0	2	17	11.8%
7	Tuscaloosa	1	0	1	0	2	17	11.8%
7	Tuskegee	2	1	1	0	4	17	23.5%
8	Gainesville	1	0	0	0	1	17	5.9%
8	Miami	2	0	0	0	2	17	11.8%
10	Chillicothe	1	0	0	0	1	17	5.9%
10	Cincinnati	2	0	1	0	3	17	17.6%
10	Cleveland	0	0	0	0	0	17	0.0%
10	Columbus	3	0	0	0	3	17	17.6%
10	Dayton	3	0	0	1	4	17	23.5%
10	Youngstown	1	2	0	0	3	17	17.6%
11	Ann Arbor	1	0	0	0	1	17	5.9%
11	Battle Creek	1	0	1	0	2	17	11.8%
11	Detroit	0	0	3	0	3	17	17.6%
11	Northern Indiana	0	0	1	1	2	17	11.8%
12	Chicago-West Side	1	0	0	0	1	17	5.9%
12	Madison	1	0	0	0	1	17	5.9%
12	Milwaukee	2	1	0	2	5	17	29.4%
12	North Chicago	1	0	0	0	1	17	5.9%
12	Tomah	1	0	0	1	2	17	11.8%
15	St. Louis	2	0	0	0	2	16	12.5%
16	Gulf Coast	3	0	0	1	4	17	23.5%
16	Houston	0	1	1	0	2	17	11.8%
16	Little Rock	3	0	0	1	4	17	23.5%
16	New Orleans	1	0	2	1	4	17	23.5%

VISN	SITE	MONITORING DOMAIN				Total Team Outliers	Total Applicable Monitors	% Outliers/ Applicable Monitors
		STRUCTURE	CLIENT	PROCESS	OUTCOME			
17	Dallas	2	0	2	0	4	17	23.5%
19	Denver	1	0	1	0	2	17	11.8%
19	Grand Junction	2	1	0	0	3	17	17.6%
19	Salt Lake City	1	1	1	3	6	17	35.3%
19	Southern Colorado	2	1	1	0	4	17	23.5%
20	American Lake	0	0	0	1	1	17	5.9%
20	Boise	1	1	1	0	3	17	17.6%
20	Portland	0	0	0	0	0	17	0.0%
20	Seattle	2	0	0	0	2	17	11.8%
21	Palo Alto	1	0	0	0	1	17	5.9%
21	San Francisco	1	0	1	0	2	17	11.8%
22	Greater Los Angeles	3	0	1	0	4	17	23.5%
23	Iowa City	2	0	1	1	4	17	23.5%
23	Knoxville	0	0	0	0	0	17	0.0%
23	Minneapolis	1	0	0	1	2	17	11.8%
23	Omaha	2	0	1	0	3	16	18.8%
23	St. Cloud	1	0	3	1	5	17	29.4%
	OUTLIER SITES (N)	52	10	32	17	63	1068	15.3%
	OUTLIER SITES (%)	82.5%	15.9%	50.8%	27.0%	100.0%		
	OUTLIER TOTAL	88	11	44	20	163	1068	15.3%
	TOTAL MONITORS	315	189	314	250	1068		
	% OUTLIERS/TOTAL	27.9%	5.8%	14.0%	8.0%	15.3%		
	OUTLIER MEAN	1.40	0.17	0.70	0.32	2.59	17	

Total number of critical monitors for which sites is an outlier in the undesired direction.

TABLE 2-28. OUTLIERS FOR TEAM STRUCTURE MONITORS

VISN	SITE	1 FTE UNFILLED MORE THAN 6 MONTHS (Y)	2 UNASSIGNED MEDICAL SUPPORT MD and/or RN (N)		3 CASELOAD SIZE MEAN RATIO OF CLIENTS PER CLINICAL FTEE (LT 7 or GT 15)	4 TEAM SIZE # FULL-TIME CLINICAL STAFF (4.0+ FTEE)	5 TOTAL TEAM STRUCTURE OUTLIERS (1+2+3+4)	6 # APPLICABLE TEAM STRUCTURE MONITORS (1+2+3+4)	7 % OUTLIERS/ APPLICABLE STRUCTURE MONITORS (5/6)
Outlier Direction									
1	Bedford						0	5	0%
1	Brockton	Y	N	N	19.09	3.30	5	5	100%
1	Togus					2.70	1	5	20%
1	West Haven	Y					1	5	20%
2	Albany	Y				3.55	2	5	40%
2	Buffalo						0	5	0%
2	Canandaigua		N				1	5	20%
2	Syracuse	Y			21.00	2.00	3	5	60%
3	Brooklyn	Y	N				2	5	40%
3	Montrose						0	5	0%
3	New Jersey	Y					1	5	20%
3	Northport		N				1	5	20%
4	Coatesville		N				1	5	20%
4	Pittsburgh				15.07		1	5	20%
5	Baltimore						0	5	0%
5	Perry Point	Y			15.45		2	5	40%
5	Washington, DC	Y				2.00	2	5	40%
6	Hampton	Y	N			3.20	3	5	60%
6	Salem	Y				3.00	2	5	40%
6	Salisbury	Y				2.50	2	5	40%
7	Atlanta	Y					1	5	20%
7	Augusta	Y	N				2	5	40%
7	Tuscaloosa	Y					1	5	20%
7	Tuskegee	Y	N				2	5	40%
8	Gainesville				15.25		1	5	20%
8	Miami	Y				3.50	2	5	40%
10	Chillicothe	Y					1	5	20%
10	Cincinnati				16.00	3.50	2	5	40%
10	Cleveland						0	5	0%
10	Columbus	Y	N			2.33	3	5	60%
10	Dayton	Y	N			3.50	3	5	60%
10	Youngstown					3.50	1	5	20%
11	Ann Arbor					3.50	1	5	20%
11	Battle Creek	Y					1	5	20%
11	Detroit						0	5	0%
11	Northern Indiana						0	5	0%
12	Chicago-West Side	Y					1	5	20%
12	Madison					3.30	1	5	20%
12	Milwaukee	Y				2.50	2	5	40%
12	North Chicago	Y					1	5	20%
12	Tomah					3.25	1	5	20%
15	St. Louis		N			3.50	2	5	40%
16	Gulf Coast	Y				3.50	2	5	40%
16	Houston						0	5	0%
16	Little Rock	Y				3.00	2	5	40%
16	New Orleans					3.50	1	5	20%
17	Dallas	Y	N				2	5	40%
19	Denver		N				1	5	20%
19	Grand Junction		N			3.90	2	5	40%
19	Salt Lake City	Y					1	5	20%
19	Southern Colorado		N		16.91		2	5	40%
20	American Lake						0	5	0%
20	Boise					3.00	1	5	20%

VISN	SITE	1 FTE UNFILLED MORE THAN 6 MONTHS (Y)	2 UNASSIGNED MEDICAL SUPPORT MD and/or RN (N)		3 CASELOAD SIZE MEAN RATIO OF CLIENTS PER CLINICAL FTEE (LT 7 or GT 15)	4 TEAM SIZE # FULL-TIME CLINICAL STAFF (4.0+ FTEE)	5 TOTAL TEAM STRUCTURE OUTLIERS (1+2+3+4)	6 # APPLICABLE TEAM STRUCTURE MONITORS (1+2+3+4)	7 % OUTLIERS/ APPLICABLE STRUCTURE MONITORS (5/6)
Outlier Direction									
20	Portland						0	5	0%
20	Seattle	Y				2.60	2	5	40%
21	Palo Alto		N				1	5	20%
21	San Francisco					3.00	1	5	20%
22	Greater Los Angeles	Y	N			3.50	3	5	60%
23	Iowa City		N			3.50	2	5	40%
23	Knoxville						0	5	0%
23	Minneapolis				15.11		1	5	20%
23	Omaha		N			3.50	2	5	40%
23	St. Cloud					3.50	1	5	20%
	OUTLIER SITES (N)	29	19	1	8	29	52	315	27%
	OUTLIER SITES (%)	46.0%	30.2%	1.6%	12.7%	46.0%	82.5%	100%	
	OUTLIER TOTAL						86	315	27%

Outlier: Significant difference ($p<0.05$) from median site in undesired direction, after adjusting for client differences and time in program.
[Team structure monitors are presented in Report Tables 2-5 (p.35) and 2-6(36).]

TABLE 2-29. OUTLIERS FOR CLIENT CHARACTERISTICS MONITORS

VISN	Outlier Direction	1 PERCENT OF CLIENTS WITH GTE 30 DAYS HOSP. YR PRE (LT 50%)	2 PERCENT OF CLIENTS WITH PSYCHOTIC DX AT ENTRY. (LT 50%)	3 MEAN GAF AT ENTRY EXCEEDS 50 (GT 50)	4 Total Client Outliers (1+2+3)	5 # Applicable Client Characteristic Monitors (1+2+3)	6 % Outliers/ Applicable Client Monitors (4/5)
1	Bedford				0	3	0%
1	Brockton				0	3	0%
1	Togus				0	3	0%
1	West Haven				0	3	0%
2	Albany				0	3	0%
2	Buffalo	25.5			1	3	33%
2	Canandaigua				0	3	0%
2	Syracuse				0	3	0%
3	Brooklyn				0	3	0%
3	Montrose				0	3	0%
3	New Jersey				0	3	0%
3	Northport				0	3	0%
4	Coatesville				0	3	0%
4	Pittsburgh				0	3	0%
5	Baltimore				0	3	0%
5	Perry Point				0	3	0%
5	Washington, DC	47.1			1	3	33%
6	Hampton				0	3	0%
6	Salem				0	3	0%
6	Salisbury				0	3	0%
7	Atlanta				0	3	0%
7	Augusta				0	3	0%
7	Tuscaloosa				0	3	0%
7	Tuskegee			50.2	1	3	33%
8	Gainesville				0	3	0%
8	Miami				0	3	0%
10	Chillicothe				0	3	0%
10	Cincinnati				0	3	0%
10	Cleveland				0	3	0%
10	Columbus				0	3	0%
10	Dayton				0	3	0%
10	Youngstown	39.5		50.8	2	3	67%
11	Ann Arbor				0	3	0%
11	Battle Creek				0	3	0%
11	Detroit				0	3	0%
11	Northern Indiana				0	3	0%
12	Chicago-West Side				0	3	0%
12	Madison				0	3	0%
12	Milwaukee	17.4			1	3	33%
12	North Chicago				0	3	0%
12	Tomah				0	3	0%
15	St. Louis				0	3	0%
16	Gulf Coast				0	3	0%
16	Houston	48.4			1	3	33%
16	Little Rock				0	3	0%
16	New Orleans				0	3	0%
17	Dallas				0	3	0%
19	Denver				0	3	0%
19	Grand Junction	44.7			1	3	33%
19	Salt Lake City	38.2			1	3	33%
19	Southern Colorado	19.2			1	3	33%
20	American Lake				0	3	0%
20	Boise	38.5			1	3	33%
20	Portland				0	3	0%
20	Seattle				0	3	0%
21	Palo Alto				0	3	0%
21	San Francisco				0	3	0%
22	Greater Los Angeles				0	3	0%
23	Iowa City				0	3	0%
23	Knoxville				0	3	0%
23	Minneapolis				0	3	0%
23	Omaha				0	3	0%
23	St. Cloud				0	3	0%
OUTLIER SITES (N)		9	0	2	10	189	5%
OUTLIER SITES (%)		14.3%	0.0%	3.2%	17.5%	100%	
OUTLIER TOTAL					11	189	6%

[Client monitors are presented in Report Tables 2-10 and 2-11.]

TABLE 2-30. OUTLIERS FOR CLINICAL PROCESS MONITORS

VISN	SITE	1 Tenure % Clients Discharged (>20%)	2 Intensity % Clients Seen For GTE 1 Hour Per Week (<1HR/WK)	3 Location % Clients Seen 60% Or More In Community (<50%)	4 Frequency # Adjusted Face-Face Contacts/WK /Veteran (<1/WK)	5 Team Provides Psychiatric Rehabilit'n Services (<25% VETS)	6 Total Clinical Process Outliers (1+2+3+4+5)	7 # Applicable Clinical Process Outliers (1+2+3+4+5)	8 % Outliers/ Applicable Clinical Process Monitors (6/7)
Outlier Direction									
1	Bedford	25.3%					1	5	20%
1	Brockton				0.70		1	5	20%
1	Togus						0	5	0%
1	West Haven						0	5	0%
2	Albany						0	5	0%
2	Buffalo		33.8		0.90	11.3	3	5	60%
2	Canandaigua						0	5	0%
2	Syracuse	21.2%			0.76		2	5	40%
3	Brooklyn	21.1%			0.61		2	5	40%
3	Montrose		22.5			17.4	2	5	40%
3	New Jersey				0.84		1	4	25%
3	Northport						0	5	0%
4	Coatesville				0.89		1	5	20%
4	Pittsburgh				0.85		1	5	20%
5	Baltimore				0.96		1	5	20%
5	Perry Point						0	5	0%
5	Washington, DC						0	5	0%
6	Hampton	28.1%					1	5	20%
6	Salem		45.2		0.94		2	5	40%
6	Salisbury	42.9%					1	5	20%
7	Atlanta		43.9				1	5	20%
7	Augusta						0	5	0%
7	Tuscaloosa					16.1	1	5	20%
7	Tuskegee	37.9%					1	5	20%
8	Gainesville						0	5	0%
8	Miami						0	5	0%
10	Chillicothe						0	5	0%
10	Cincinnati		33.9				1	5	20%
10	Cleveland						0	5	0%
10	Columbus						0	5	0%
10	Dayton						0	5	0%
10	Youngstown						0	5	0%
11	Ann Arbor						0	5	0%
11	Battle Creek		41.0				1	5	20%
11	Detroit		40.8		0.73	23.8	3	5	60%
11	Northern Indiana		39.7				1	5	20%
12	Chicago-West Side						0	5	0%
12	Madison						0	5	0%
12	Milwaukee						0	5	0%
12	North Chicago						0	5	0%
12	Tomah						0	5	0%
15	St. Louis						0	5	0%
16	Gulf Coast						0	5	0%
16	Houston					24.0	1	5	20%
16	Little Rock						0	5	0%
16	New Orleans				0.80	17.4	2	5	40%
17	Dallas	20.9%	37.2				2	5	40%
19	Denver				0.87		1	5	20%
19	Grand Junction						0	5	0%
19	Salt Lake City				0.90		1	5	20%
19	Southern Colorado		35.8				1	5	20%
20	American Lake						0	5	0%
20	Boise				0.47		1	5	20%
20	Portland						0	5	0%
20	Seattle						0	5	0%
21	Palo Alto						0	5	0%
21	San Francisco		16.3				1	5	20%
22	Greater Los Angeles				0.32		1	5	20%
23	Iowa City				0.78		1	5	20%
23	Knoxville						0	5	0%
23	Minneapolis						0	5	0%
23	Omaha					18.2	1	5	20%
23	St. Cloud		39.5		0.85	24.1	3	5	60%
OUTLIER SITES (N)		7	12	0	17	8	32	314	14%
OUTLIER SITES (%)		11%	19%	0%	27%	13%	51%	100%	
OUTLIER TOTAL							44	314	16%

[Clinical process monitors are presented in Report Tables 2-12, 2-13, 2-14, and 2-15.]

TABLE 2-31. OUTLIERS FOR CLIENT OUTCOME MONITORS

VISN	SITE	1 365 Days % Change MH Days (Post-Pre) (Low)	2 Reported Symptoms % Change (BSI) (HIGH)	3 Observed Symptoms % Change (BPRS) (HIGH)	4 Quality of Life % Change (QOL) (LOW)	5 Total Client Outcome Outliers (1+2+3+4)	6 # Applicable Client Outcome Monitors (1+2+3+4)	7 % Outliers/ Applicable Outcome Monitors (5/6)
	Outlier Direction							
1	Bedford					0	4	0%
1	Brockton					0	4	0%
1	Togus					0	4	0%
1	West Haven					0	4	0%
2	Albany					0	4	0%
2	Buffalo	5.5%				1	4	25%
2	Canandaigua			10.07%		1	4	25%
2	Syracuse					0	4	0%
3	Brooklyn					0	4	0%
3	Montrose			10.28%		1	4	25%
3	New Jersey					0	4	0%
3	Northport					0	4	0%
4	Coatesville					0	4	0%
4	Pittsburgh					0	4	0%
5	Baltimore		16.5%			1	4	25%
5	Perry Point					0	4	0%
5	Washington, DC					0	4	0%
6	Hampton					0	4	0%
6	Salem					0	4	0%
6	Salisbury			23.30%		1	4	25%
7	Atlanta					0	4	0%
7	Augusta					0	4	0%
7	Tuscaloosa					0	4	0%
7	Tuskegee					0	4	0%
8	Gainesville					0	4	0%
8	Miami					0	4	0%
10	Chillicothe					0	4	0%
10	Cincinnati					0	4	0%
10	Cleveland					0	4	0%
10	Columbus					0	4	0%
10	Dayton	-9.1%				1	4	25%
10	Youngstown					0	4	0%
11	Ann Arbor					0	4	0%
11	Battle Creek					0	4	0%
11	Detroit					0	4	0%
11	Northern Indiana	-35.8%				1	4	25%
12	Chicago-West Side					0	4	0%
12	Madison					0	4	0%
12	Milwaukee	-26.2%		16.80%		2	4	50%
12	North Chicago					0	4	0%
12	Tomah	-33.3%				1	4	25%
15	St. Louis					0	3	0%
16	Gulf Coast		4.7%			1	4	25%
16	Houston					0	4	0%
16	Little Rock	1.0%				1	4	25%
16	New Orleans	-26.7%				1	4	25%
17	Dallas					0	4	0%
19	Denver					0	4	0%
19	Grand Junction					0	4	0%
19	Salt Lake City		15.8%	12.31%	-8.80%	3	4	75%
19	Southern Colorado					0	4	0%
20	American Lake			12.64%		1	4	25%
20	Boise					0	4	0%
20	Portland					0	4	0%
20	Seattle					0	4	0%
21	Palo Alto					0	4	0%
21	San Francisco					0	4	0%
22	Greater Los Angeles					0	4	0%
23	Iowa City	-26.7%				1	4	25%
23	Knoxville					0	4	0%
23	Minneapolis			11.92%		1	4	25%
23	Omaha					0	3	0%
23	St. Cloud	-32.7%				1	4	25%
	OUTLIER SITES (N)	9	3	7	1	17	250	7%
	OUTLIER SITES (%)	14.3%	4.8%	11.1%	1.6%	31.7%	99.2%	32.0%
	OUTLIER TOTAL					20	250	7%

[Client outcome monitors are presented in Report Tables 2-18a, 2-19, 2-20 and 2-23]

Note: There were two negative outliers for the IADL monitor. GAF and Satisfaction outcome monitors were excluded.

TABLE 2-32. OUTLIERS FOR MINIMUM STANDARDS

VISN	SITE	1 % OF CLIENTS WITH PSYCHOTIC DX AT ENTRY	2 PERCENT OF CLIENTS WITH GTE 30 DAYS HOSP. PRIOR YR	3 # ADJUSTED FACE-FACE CONTACTS/WK /VETERAN	4 CASELOAD SIZE PER CLINICAL FTEE	5 % CLIENTS SEEN 60% OR MORE IN COMMUNITY	6 TEAM PROVIDES PSYCHIATRIC REHABILITAT'N SERVICES	7 TENURE %CLIENTS DISCHARGED	8 TEAM SIZE # FULL-TIME CLINICAL STAFF	9 TOTAL MINIMUM PROGRAM STANDARDS OUTLIERS	10 % MINIMUM PROGRAM STANDARDS OUTLIERS	11 % MINIMUM PROGRAM STANDARDS OUTLIERS	12 CHANGE MINIMUM PROGRAM STANDARDS OUTLIERS
Outlier Direction		(LT 50%)	(LT 50%)	(<1/WK)	7:1 TO 15:1	(<50%)	(<25%)	(>20%)	(4.0+FTEE)	(Col. 1..8)	(Col. 9/8)	FY 2002	FY03-FY02
1	Bedford							25.3%		1	12.5%	12.5%	0.0%
1	Brockton			0.70	19.1				3.30	3	37.5%	25.0%	12.5%
1	Togus								2.70	1	12.5%	25.0%	-12.5%
1	West Haven									0	0.0%	0.0%	0.0%
2	Albany								3.55	1	12.5%	37.5%	-25.0%
2	Buffalo		25.5	0.90			11.3			3	37.5%	50.0%	-12.5%
2	Canandaigua									0	0.0%	0.0%	0.0%
2	Syracuse			0.76	21.0			21.2%	2.00	4	50.0%	50.0%	0.0%
3	Brooklyn			0.61				21.1%		2	25.0%	12.5%	12.5%
3	Montrose						17.4			1	12.5%	37.5%	-25.0%
3	New Jersey			0.84						1	12.5%	25.0%	-12.5%
3	Northport									0	0.0%		
4	Coatesville			0.89						1	12.5%	37.5%	-25.0%
4	Pittsburgh			0.85	15.1					2	25.0%	25.0%	0.0%
5	Baltimore			0.96						1	12.5%		
5	Perry Point				15.4					1	12.5%	25.0%	-12.5%
5	Washington, DC		47.1						2.00	2	25.0%		
6	Hampton							28.1%	3.20	2	25.0%		
6	Salem			0.94					3.00	2	25.0%		
6	Salisbury							42.9%	2.50	2	25.0%	37.5%	-12.5%
7	Atlanta									0	0.0%	25.0%	-25.0%
7	Augusta									0	0.0%	0.0%	0.0%
7	Tuscaloosa						16.1			1	12.5%		
7	Tuskegee							37.9%		1	12.5%	50.0%	-37.5%
8	Gainesville				15.3					1	12.5%	12.5%	0.0%
8	Miami								3.50	1	12.5%		
10	Chillicothe									0	0.0%	0.0%	0.0%
10	Cincinnati				16.0				3.50	2	25.0%	37.5%	-12.5%
10	Cleveland									0	0.0%	12.5%	-12.5%
10	Columbus								2.33	1	12.5%	37.5%	-25.0%
10	Dayton								3.50	1	12.5%	12.5%	0.0%
10	Youngstown		39.5						3.50	2	25.0%		
11	Ann Arbor								3.50	1	12.5%	12.5%	0.0%
11	Battle Creek									0	0.0%	0.0%	0.0%
11	Detroit			0.73			23.8			2	25.0%	12.5%	12.5%
11	Northern Indiana									0	0.0%		
12	Chicago-West Side									0	0.0%		
12	Madison								3.30	1	12.5%	12.5%	0.0%

VISN	SITE	1 % OF CLIENTS WITH PSYCHOTIC DX AT ENTRY	2 PERCENT OF CLIENTS WITH GTE 30 DAYS HOSP. PRIOR YR	3 # ADJUSTED FACE-FACE CONTACTS/WK /VETERAN	4 CASELOAD SIZE PER CLINICAL FTEE	5 % CLIENTS SEEN 60% OR MORE IN COMMUNITY	6 TEAM PROVIDES PSYCHIATRIC REHABILITAT'N SERVICES	7 TENURE %CLIENTS DISCHARGED	8 TEAM SIZE # FULL-TIME CLINICAL STAFF	9 TOTAL MINIMUM PROGRAM STANDARDS OUTLIERS	10 % MINIMUM PROGRAM STANDARDS OUTLIERS	11 % MINIMUM PROGRAM STANDARDS OUTLIERS	12 CHANGE MINIMUM PROGRAM STANDARDS OUTLIERS
Outlier Direction		**(LT 50%)**	**(LT 50%)**	**(<1/WK)**	**7:1 TO 15:1**	**(<50%)**	**(<25%)**	**(>20%)**	**(4.0+FTEE)**	**(Col. 1..8)**	**(Col. 9/8)**	**FY 2002**	**FY03-FY02**
12	Milwaukee		17.4						2.50	2	25.0%		
12	North Chicago									0	0.0%	12.5%	-12.5%
12	Tomah								3.25	1	12.5%		
15	St. Louis								3.50	1	12.5%		
16	Gulf Coast								3.50	1	12.5%		
16	Houston		48.4				24.0			2	25.0%	12.5%	12.5%
16	Little Rock								3.00	1	12.5%	12.5%	0.0%
16	New Orleans			0.80			17.4		3.50	3	37.5%		
17	Dallas							20.9%		1	12.5%	25.0%	-12.5%
19	Denver			0.87						1	12.5%	12.5%	0.0%
19	Grand Junction		44.7						3.90	2	25.0%	50.0%	-25.0%
19	Salt Lake City		38.2	0.90						2	25.0%	37.5%	-12.5%
19	Southern Colorado		19.2		16.9					2	25.0%	50.0%	-25.0%
20	American Lake									0	0.0%	0.0%	0.0%
20	Boise		38.5	0.47					3.00	3	37.5%	12.5%	25.0%
20	Portland									0	0.0%	0.0%	0.0%
20	Seattle								2.60	1	12.5%	12.5%	0.0%
21	Palo Alto									0	0.0%		
21	San Francisco								3.00	1	12.5%	25.0%	-12.5%
22	Greater Los Angeles			0.32					3.50	2	25.0%	37.5%	-12.5%
23	Iowa City			0.78					3.50	2	25.0%		
23	Knoxville									0	0.0%	12.5%	-12.5%
23	Minneapolis				15.1					1	12.5%	25.0%	-12.5%
23	Omaha						18.2		3.50	2	25.0%		
23	St. Cloud			0.85			24.1		3.50	3	37.5%		
OUTLIER SITES (N)		0	9	17	8	0	8	7	29	48	15%	22%	-7%
OUTLIER SITES (%)		0.0%	14.3%	27.0%	12.7%	0.0%	13%	11%	46%	76%			
OUTLIER TOTAL										78			

[Clinical process monitors are presented in Report Tables 2-12, 2-13, 2-14, and 2-15.]

Minimum Program Standards are identified in the MHICM Directive and derived from FY 2002 monitors.

Shaded "outlier" values fall beneath threshold levels for the minimum program standard.

Table 2-33. SITE OUTLIER REVIEW SUMMARY

VISN	SITE	Site # of Outliers 2003 Total #	Reason A Legitimate differences not conflict with national goals # of A's	Reason B Local Policies may conflict with national goals # of B's	Reason C Implementation problems: Correctve action taken # of C's	Reason D Implementation problems: Corrective action planned # of D's	Reason E Implementation problems: No corrective action planned # of E's	Sum of Responses Reason A-E Total
1	BEDFORD	1	1	0	0	0	0	1
1	BROCKTON	6	1	0	4	0	1	6
1	TOGUS	1	0	0	1	0	0	1
1	WEST HAVEN	1	0	0	0	1	0	1
2	ALBANY	2	0	0	1	1	0	2
2	BUFFALO	5	1	0	2	2	0	5
2	CANANDAIGUA	2	2	0	0	0	0	2
2	SYRACUSE	5	1	0	2	1	1	5
3	BROOKLYN	4	1	0	2	1	0	4
3	MONTROSE	3	0	0	0	3	0	3
3	NEW JERSEY	2	0	0	0	1	1	2
3	NORTHPORT	1	1	0	0	0	0	1
4	COATESVILLE	2	0	0	1	1	0	2
4	PITTSBURGH	2	2	0	0	0	0	2
4	BALTIMORE	2	0	2	0	0	0	2
5	PERRY POINT	2	0	1	1	0	0	2
5	WASHINGTON,DC	3	0	0	1	0	2	3
6	HAMPTON	4	0	0	2	1	0	3
6	SALEM	4	1	0	0	2	1	4
6	SALISBURY	4	2	0	2	0	0	4
7	ATLANTA	2	0	0	0	1	0	1
7	AUGUSTA	2	0	1	0	1	0	2
7	TUSCALOOSA	2	1	0	0	1	0	2
7	TUSKEGEE	4	0	0	1	2	1	4
8	GAINESVILLE	1	0	0	0	1	0	1
8	MIAMI	2	0	0	0	2	0	2
10	CHILLICOTHE	1	0	0	0	0	1	1
10	CINCINNATI	3	0	0	3	0	0	3
10	CLEVELAND	0	0	0	0	0	0	0
10	COLUMBUS	3	1	0	2	0	0	3
10	DAYTON	4	1	2	0	1	0	4
10	YOUNGSTOWN	3	1	0	2	0	0	3
11	ANN ARBOR	1	1	0	0	0	0	1
11	BATTLE CREEK	2	0	0	0	2	0	2
11	DETROIT	3	0	1	2	0	0	3
11	NORTHERN INDIANA	2	0	0	2	0	0	2
12	CHICAGO-WEST SIDE	1	0	0	1	0	0	1
12	MADISON	1	1	0	0	0	0	1
12	MILWAUKEE	5	0	0	1	0	3	4
12	NORTH CHICAGO	1	0	0	0	0	0	0
12	TOMAH	2	1	0	1	0	0	2
15	ST. LOUIS	2	2	0	0	0	0	2
16	GULF COAST	4	0	0	1	1	2	4
16	HOUSTON	2	1	0	0	1	0	2
16	LITTLE ROCK	4	0	0	4	0	0	4
16	NEW ORLEANS	4	0	0	1	3	0	4
17	DALLAS	4	0	0	1	1	1	3
19	DENVER	2	0	1	1	0	0	2
19	GRAND JUNCTION	3	2	1	0	0	0	3
19	SALT LAKE CITY	6	0	0	1	5	0	6
19	SOUTHERN COLORADO	4	0	3	0	0	1	4
20	AMERICAN LAKE	1	0	0	1	0	0	1
20	BOISE	3	3	0	0	0	0	3
20	PORTLAND +	0	0	0	0	0	0	0
20	SEATTLE	2	0	0	2	0	0	2
21	PALO ALTO	1	0	0	1	0	0	1
21	SAN FRANCISCO	2	0	1	1	0	0	2
22	GREATER LA	4	2	0	2	0	0	4
23	IOWA CITY	4	0	1	2	1	0	4
23	KNOXVILLE +	0	0	0	0	0	0	0
23	MINNEAPOLIS	2	1	0	1	0	0	2
23	OMAHA	3	2	0	1	0	0	3
23	ST.CLOUD	5	0	0	1	3	1	5
	OUTLIER SITES (N)	63	24	10	35	25	12	59
	OUTLIER SITES (%)	100.0%	38.1%	15.9%	55.6%	39.7%	19.0%	100.0%
	OUTLIER RESPONSES (N)	163	33	14	55	40	16	158
	OUTLIER RESPONSES (%)	100%	20.2%	8.6%	33.7%	24.5%	9.8%	96.9%

Source: MHICM Outlier Review, FY 2003

+ No Outliers

Figure 2-1. Travel Distance from MHICM offices to veteran residence.
Percent of veterans with case manager reported follow-up data (N=3,014).

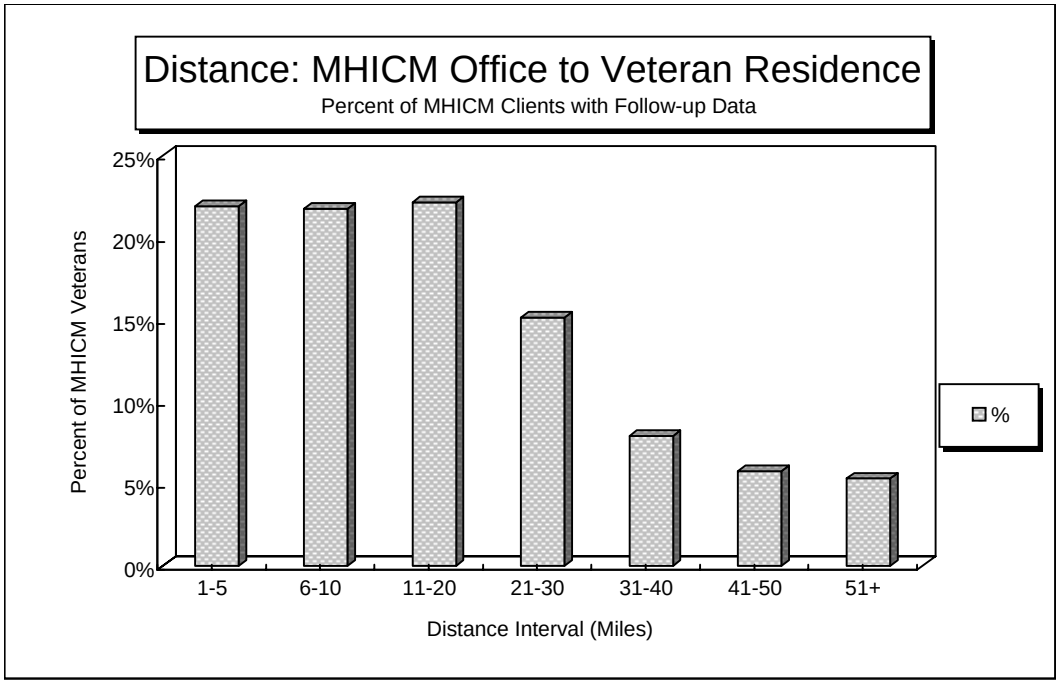


Figure 2-2. Travel Time from MHICM offices to veteran residence.
Percent of veterans with case manager reported follow-up data (N=2,973).

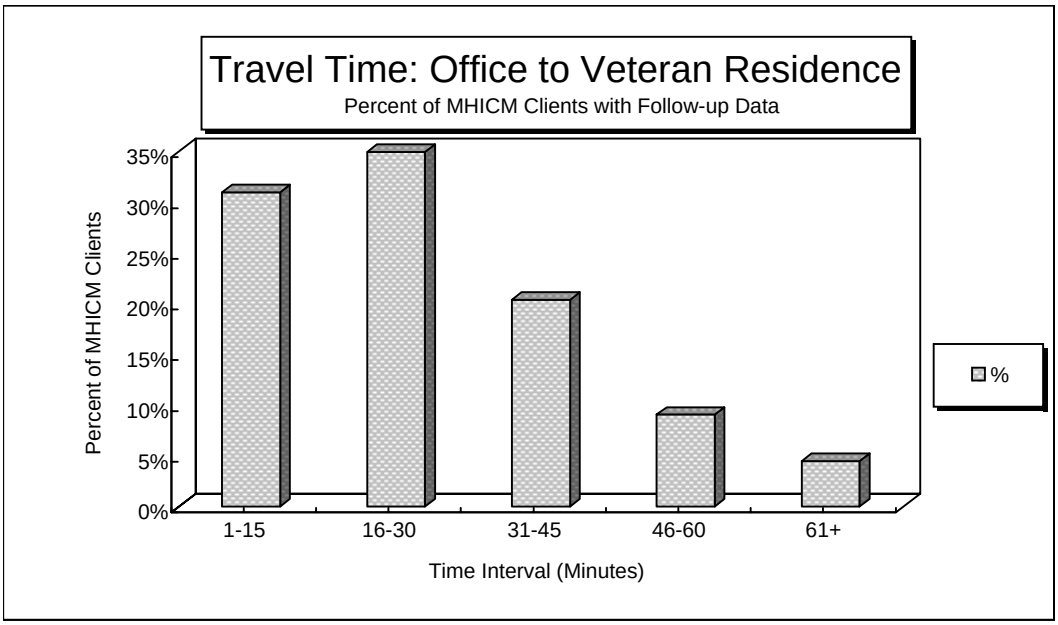


Figure 2-3. MHICM clients reporting expression of violence or criminal justice involvement. Percent at entry (N=3,415) vs. Follow-up (N=2,407).

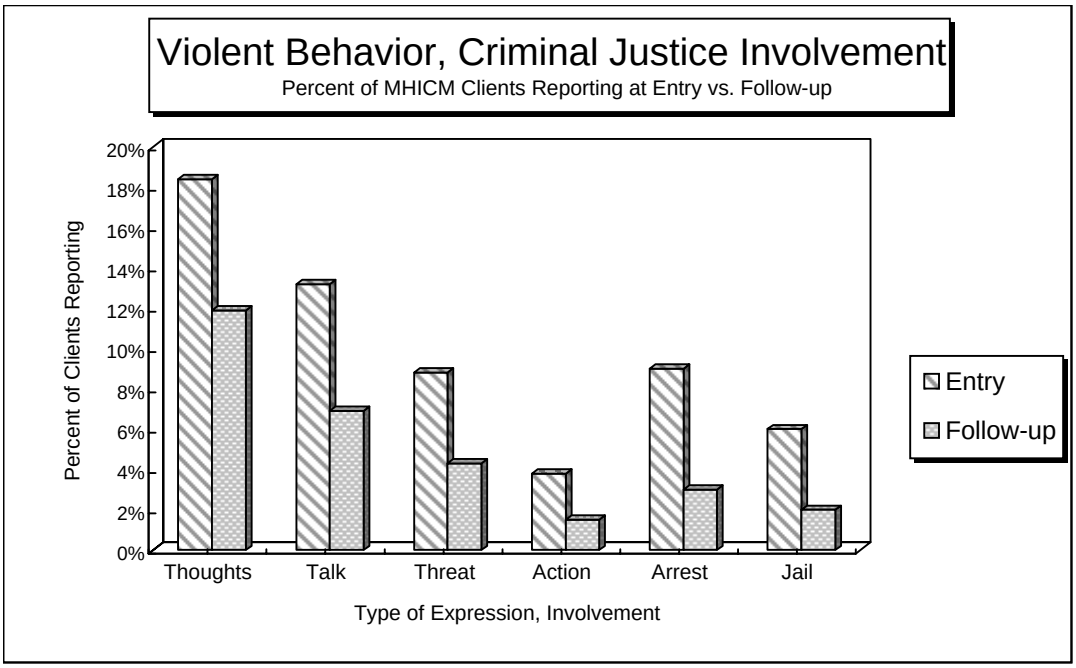


Figure 2-4. MHICM clients reporting expression of suicidality, hospitalization. Percent at entry (N=3,416) vs. Follow-up (N=2,409).

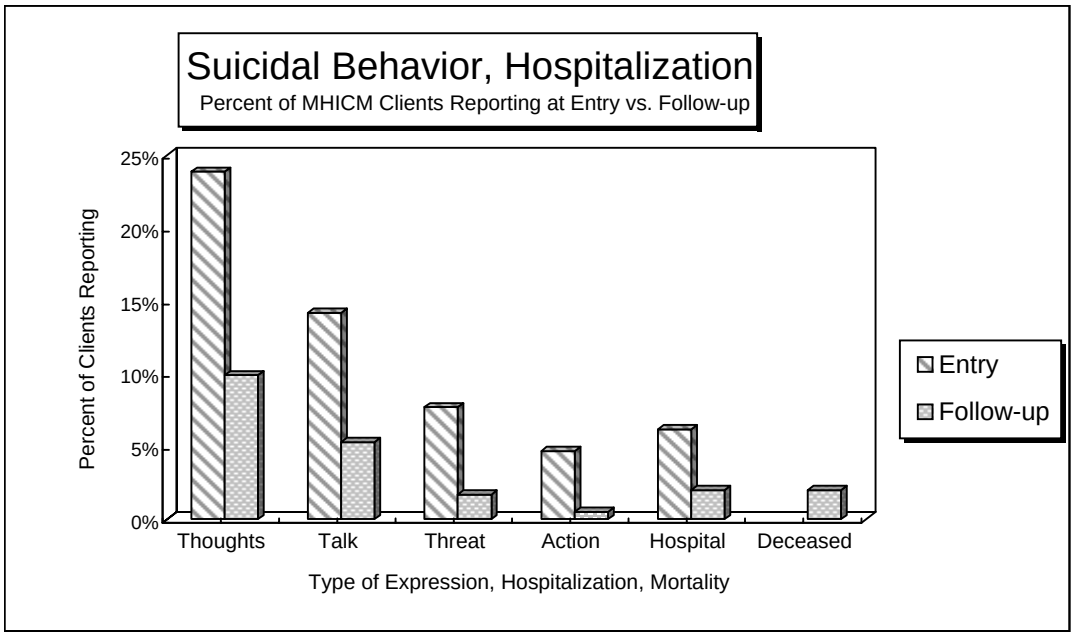


Figure 2-5. MHICM clients reporting living arrangements by level of independence.
Percent at entry (N=3,443) vs. follow-up (N=2,467).

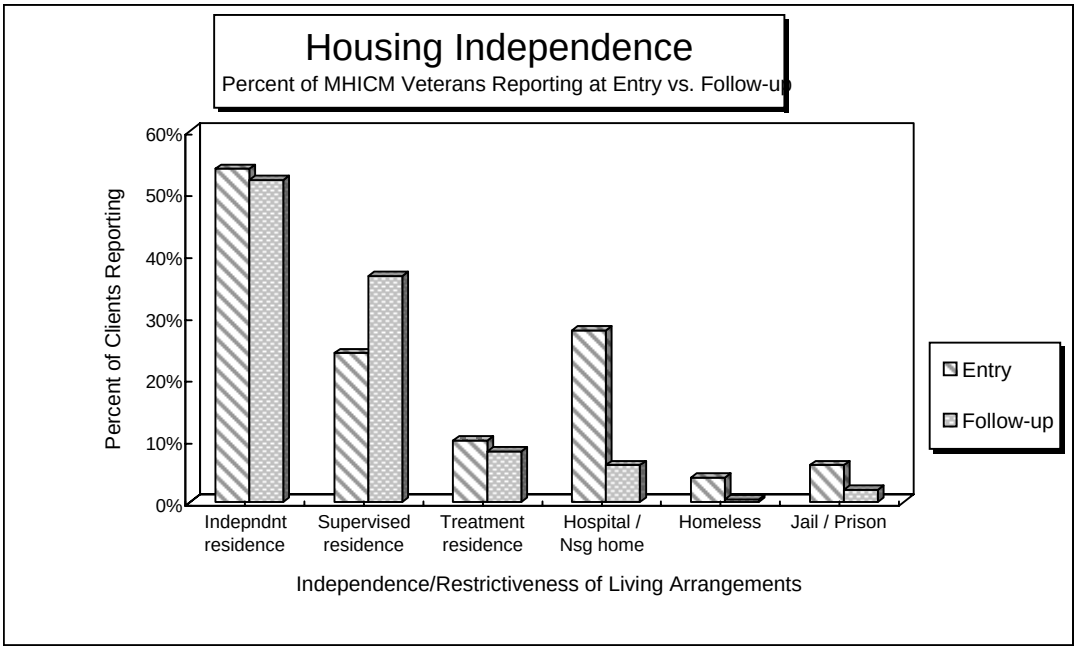
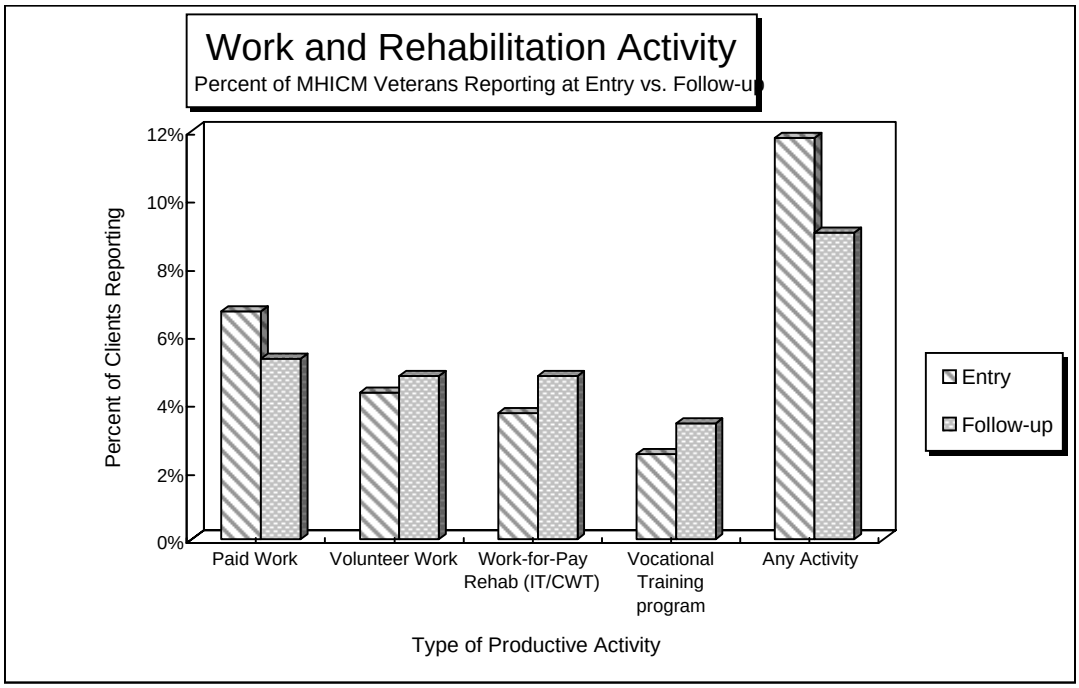


Figure 2-6. MHICM clients reporting participation in productive activity.
Percent at entry (N=3,445) vs. follow-up (N=2,476).



Appendices

Appendix A. VHA Directive 2000-034 ("MHICM Directive")
Appendix B. MHICM Planning Material & Checklists
Appendix C. Outlier Review Request and Form
Appendix D. Legend for MHICM Performance Report Tables
Appendix E. MHICM Case Management Services, FY 2003 (Registered Veterans)
Appendix F. Non-MHICM Case Management Services, FY 2003
Appendix G. MHICM Complex VERA Veterans, FY 2003
Appendix H. MHICM Program Monitor Trends, FY 1997 – 2003.

Appendix A

Department of Veterans Affairs **VHA DIRECTIVE 2000-034**
Veterans Health Administration
Washington, DC 20420 **October 2, 2000**

VHA MENTAL HEALTH INTENSIVE CASE MANAGEMENT (MHICM)

1. PURPOSE: This Veterans Health Administration (VHA) Directive describes a new initiative in mental health intensive case management (MHICM) for seriously mentally ill veterans. ***NOTE:*** *This initiative takes the place of existing Intensive Psychiatric Community Care (IPCC) programs, Intensive Community Case Management (ICCM) programs, as well as other similar assertive community treatment (ACT) programs within VHA.*

2. BACKGROUND

a. Severe mental illness, primarily psychoses, is a major problem among veterans. Fiscal Year (FY) 1998 Compensation and Pension (C&P) data indicate that 136,362 veterans are service-connected for psychoses of which over 67,700 use VHA services. Over 174,030 veterans with psychoses, overall, used VHA services in FY 1998. The clinical literature suggests that approximately 20 percent of severely mentally ill patients are in need of intensive community case management services in the typical public mental health system. This intensive multidisciplinary team approach to ambulatory management and treatment of patients in, and coordinated with the community and its services, is clearly distinguished from usual case management by: engagement in community settings of highly dysfunctional patients traditionally managed in hospitals; an unusually high staff to patient ratio; multiple visits per week if needed; interventions primarily in the community rather than in office settings; and fixed team responsibility, around the clock, for total patient care over a prolonged period (see subpar. 2e(2)). Multiple studies, including three recent VHA studies, have shown that the intervention is cost effective, particularly where the service is offered to chronically ill, hospitalized patients and where the model is rigorously adhered to with respect to assertiveness of the intervention and maintaining low caseloads (see sub par. 2d). There is compelling evidence for the effectiveness of ACT in patients with psychosis, but its use may also be considered in severe and persistent affective disorder, post-traumatic stress disorder (PTSD), etc., where independent functioning is impaired. A FY 1998 survey by the Committee on Care of Severely Chronically Mentally Ill (SCMI) Veterans revealed that just over 8,000 veterans currently received some form of mental health team case management from VHA, and of those, only 2,000 met ACT Fidelity Measures criteria for intensive case management. Therefore, a gap in these state-of-the-art services is evident, resulting in unnecessary costs and patient morbidity to VHA.

b. On March 25, 1999, in order to obtain a wider range of views in formulating a VHA-wide approach, the Chief Network Officer appointed a SCMI Strategic Implementation Committee composed of four Clinical Managers, a medical center Director, a Mental Health Care Line Director, the National Director of the Northeast Program Evaluation Center (NEPEC), a representative of Vietnam Veterans Association, and a representative of the Mental Health Strategic Healthcare Group.

THIS VHA DIRECTIVE EXPIRES OCTOBER 31, 2005

c. The SCMI Strategic Implementation Committee considered various models of intensive case management within the Mental Health service area, then defined intensive case management for the severely mentally ill in VHA and the accountability expected from this designated program.

d. MHICM is a cost effective intervention given appropriate case selection. This may seem like a paradox given the known resource intensity of the interventions. The efficiency (offset) results from avoidance of other costly interventions such as multiple or lengthy hospitalizations, and extensive ambulatory clinic use, including visits to emergency rooms. Paragraph 3 notes that these programs need to be established from existing funds. To realize the efficiency and accomplish this out of existent resources requires a shift of resources that previously supported the extensive inpatient and outpatient use to underwrite MHICM. It is acknowledged that there will be a need for expedited mental health resource shifts, as well as shifts from other programs that gain economies from implementation of MHICM, including bed closures, where justified, as this more effective alternative of MHICM is implemented.

e. **Definitions**

(1) **Target Population.** MHICM programs are intended to provide necessary treatment and support for veterans who meet all of the following five criteria:

(a) Diagnosis of Severe and Persistent Mental Illness. Diagnosis of severe and persistent mental illness includes, but is not limited to: schizophrenia, bipolar disorder, major affective disorder, or severe post-traumatic stress disorder;

(b) Severe Functional Impairment. Severe functional impairment is such that the veteran is neither currently capable of successful and stable self-maintenance in a community living situation nor able to participate in necessary treatments without intensive support;

(c) Inadequately Served. This means inadequately served by conventional clinic-based outpatient treatment or day treatment;

(d) High Hospital Use. High hospital use as evidenced by over 30 days of psychiatric hospital care during the previous year or three or more episodes of psychiatric hospitalization;

(e) Clinically Appropriate for MHICM Approach. Patients who are more appropriately managed clinically as inpatients need to remain in the inpatient setting; that is, the positive aspects of MHICM should not be used to justify moving patients who would be better served by inpatient care to this ambulatory care model.

(2) **Description of the Program.** MHICM programs are delivered by an integrated, multidisciplinary team and are based on the Substance Abuse Mental Health Services Administration (SAMHSA) ACT standards. There are four core treatment elements:

(a) Very Frequent Contacts between Care Givers and Patients. The treatment process would include two phases:

1. High intensity of care primarily through home and community visits, with low caseloads (seven to fifteen veterans per clinician), allowing rapid attention to crisis and development of community living skills to prevent crisis in this exceptionally vulnerable population.

2. Appropriate transition to lower intensity care. After 1 year of MHICM treatment, patients can be transferred to either standard care or to continuous treatment by the MHICM team at a lower level of intensity (e.g., with caseloads of up to 30 per clinician). Characteristics of the readiness for a lower level of care would include the following: patients are clinically stable, not abusing addictive substances, not relying on extensive inpatient or emergency services, capable of maintaining themselves in a community living situation, and independently participating in necessary treatments. ***NOTE:*** *NEPEC will monitor this transition through periodic clinical progress reports and will report both levels of intensity separately.*

(b) Flexibility and Community Orientation. Flexibility and community orientation with most services provided in community settings and involving integration with natural support systems whenever possible (e.g., family members, landlords, employer).

(c) Focus on Rehabilitation. Focus on rehabilitation through practical problem solving, crisis resolution, adaptive skill building, and transition to self-care and independent living where possible.

(d) Responsibility. Identification of the team as a "fixed point of clinical responsibility" providing continuity of care for each veteran, wherever the veteran happens to be, for a prolonged period. This is expected to initially be 1 year, but subsequently will be based on a periodic review of continuing need for intensive services.

(3) **Data Recording**

(a) Attachment A-A. Attachment A-A contains the definitions of the revised Decision Support System (DSS) Identifiers for the MHICM workload (546 and 552) as well as the new code for general (non-intensive) mental health case management (564).

(b) Attachment A-B. Attachment A-B provides Veterans Integrated Service Networks (VISNs) and Department of Veterans Affairs (VA) leadership with population-based data to help facilitate assessment of the need for MHICM teams in each VISN. These data include the number of:

1. Veterans who meet inpatient utilization criteria (30 days of psychiatric hospitalization or three admissions);

2. Outpatients who meet diagnostic criteria for schizophrenia, bipolar, or major affective disorder and had six or more mental health outpatient contacts in FY 1998;

3. Veterans in the Psychiatric Special Care category under the Veterans Equitable Resource Allocation (VERA) system, and

4. Psychiatric patients with lengths of stay over 1 year.

(c) After a period during which new teams will be added to the roster of MHICM teams participating in the national program, NEPEC will present a data summary for each VISN of the ratio of MHICM-treated patients to those potentially eligible as estimated by each of the indicators of population need identified in Appendix B. VISNs may use these data to identify potential service gaps.

3. POLICY: It is VHA policy to support the development of case management approaches sufficient to meet the need where appropriate. Where the need for intensive mental health case management is demonstrated, MHICM programs need to be established out of existing funds (see subpar. 2d). ***NOTE:*** *NEPEC, which has developed and evaluated this type of program for 10 years, is providing the leadership for training and monitoring of new and established teams.*

4. ACTION

a. **Facility Actions.** Facilities are to:

(1) Utilize national DSS identifiers to designate MHICM activity.

(2) Provide complete nationally-adopted monitoring information for MHICM in a timely manner.

(3) Maintain team fidelity to the operating principles as described in the program description (see subpar. 2e(2)) and adhere to evidence-based clinical procedures. Adequate resources are needed to provide a critical mass of staff to comprehensively address the needs of these exceptionally vulnerable patients, even in the face of staff turnover and other absences. ***NOTE:*** *At least four clinical Full-time Employee Equivalent (FTEE) are needed for each MHICM team. Additional team members may be required in circumstances where the team is isolated from a VA medical center that can provide 24-hour coverage and emergency services. At sites where there are insufficient patients to justify a full team, consideration is to be given to partnering with the community, e.g., existing ACT teams.*

b. **Monitoring and Training Actions.** Because MHICM is resource intensive and the participating veterans are vulnerable, the following monitoring procedures will be implemented under the leadership of NEPEC. ***NOTE:*** *Forms may be obtained by contacting NEPEC by e-mail at "Robert.Rosenheck@med.VA.gov" or telephone at (203) 937-3850.*

(1) **Standard Intake Data Form (IDF).** Standard IDF will be administered to all new admissions to MHICM. It will document adherence to the eligibility criteria listed above and record baseline data on clinical status, functional impairment, and satisfaction with services. The IDF takes about 30 to 45 minutes to complete per patient.

(2) **Follow-up Data Form (FDF).** Follow-up FDF must be administered 6 months and 1 year after program entry and annually thereafter. It consists of a subset of health status and community adjustment measures from IDF. The FDF takes about 25 to 30 minutes to complete per patient.

(3) **A Clinical Process Form (CPF).** A CPF will document delivery of MHICM service elements and will be completed by each client's primary case manager every 6 months after program entry. The CPF takes about 15 minutes to complete on each patient.

(4) **MHICM Check List and ACT Fidelity Measure.** The MHICM Check List and ACT Fidelity Measure is to be completed by the program director once a year for the entire program. This form takes about 20 minutes to complete.

(5) **VHA Administrative Data**. VHA administrative data will be used to track MHICM process and outcomes using inpatient and outpatient service utilization data available from the Patient Treatment File and the Outpatient Care File in the Austin Data Processing Center.

c. **Mental Health Strategic Healthcare Group (MHSHG) Actions**. The MHSHG will:

(1) Assess, deploy, evaluate, and disseminate quality and cost efficient best practices by utilizing NEPEC, Management Science, and Allocation Resource Center data and expertise.

(2) Oversee effectiveness of MHICM program, monitoring, training, and evaluation by convening a broad based panel of experts to assess clinical and deployment outcomes and to determine future actions.

(a) The expert panel will consist of a NEPEC-based Chair (non-voting), five field members including a Chief Financial Officer (CFO), and three NEPEC and/or VHA Headquarters members. The panel will meet as needed but at least quarterly.

(b) The expert panel will provide a regular biannual summary report of its findings, conclusions and recommendations to the Policy Board.

(c) The expert panel will be responsible for preparing an annual cost and benefit analysis for the Policy Board.

(d) The expert panel will oversee, account, and provide a progress report to the Policy Board at appropriate times, but no less than annually, on the shift of resources to offset the resource needs of the MHICM program.

d. **NEPEC Actions.** NEPEC will:

(1) Provide direct oversight to all MHICM programs to ensure that standards are met through periodic site visits to treatment teams, regular national meetings of team leaders, conference calls, consultation, and national training programs. Programs systematically not meeting standards may be decertified from using the MHICM DSS Identifiers.

(2) Make additional efforts to integrate this data collection into standard VA computerized data systems, to provide sites with spreadsheet summaries of national and site-by-site program results on a regular basis, and to provide clinicians with client-specific output for clinical review.

(3) Be responsible for:

(a) Producing periodic reports on the structure, process, and outcomes of MHICM services for training programs in evaluation and clinical procedures.

(b) Working with the expert panel and its CFO (see subpar. 4c(2)) in the development of an effective costing system, such as activity-based costing, to account the MHICM program.

(c) Facilitating ongoing communication and linkage among programs across the country.

(d) Generating reports on VISN-level population-based needs assessments.

(e) Informing VISN and VA facility-level leadership where standards are problematic and recommending actions to strengthen the MHICM teams.

e. **Network Action**. Each Network will be responsible for:

(1) Addressing population-based needs for MHICM services;

(2) Establishing strategies to provide their severely mentally ill veterans within the described target population (see subpar. 2e(1)) access to MHICM services sufficient to meet the need, and

(3) Supporting recommendations by NEPEC to maintain MHICM standards.

5. REFERENCES: VHA Program Guide 1103.3, June 3, 1999, pages 9-11, 47. ***NOTE:*** *See <http://vaww.mentalhealth.med.va.gov/MHICMRef.htm> on VHA intranet for current clinical references.*

6. FOLLOW-UP RESPONSIBILITY: The Chief Consultant, Mental Health Strategic Healthcare Group (116) is responsible for the contents of this Directive.

7. RESCISIONS. None. This VHA Directive expires the last working day of September 2005.

Thomas L.Garthwaite, M.D.
Under Secretary for Health

Attachments

DISTRIBUTION: CO: E-mailed 10/05/00
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ATTACHMENT A-A: DSS IDENTIFIERS (STOPCODE) FOR FISCAL YEAR 2003

(Abstracted from VHA Directive 2003-090) (Note these are updated from the original Directive appendix)

Name/ Description	Stop code	CDR Account	Effective Date	Definition
TELEPHONE/MHICM	546	2780.00	10/1/99	Records patient consultation or psychiatric care, management, advice, and/or referral provided by telephone contact between patient or patient's next of kin and/or the person(s) with whom the patient has a meaningful relationship, and clinical, professional staff assigned to the special MHICM teams (see DSS Identifier 552). Includes administrative and clinical services. **Provisions of 38 U.S.C. Section 7332 require that records which reveal the identity, prognosis, diagnosis, or treatment of VA patients which relate to drug abuse, alcoholism or alcohol abuse, infection with HIV, or sickle cell anemia, are strictly confidential and may not be released or discussed unless there is written consent from the individual.
MENTAL HEALTH INTENSIVE CASE MANAGEMENT (MHICM)	552	5117.00	10/1/99	Only VA medical centers approved to participate in MHICM (previously IPCC) programs monitored by NEPEC may use this code. This records visits with patients and/or their families or caregivers by MHICM staff at all locations including VA outpatient or MHICM satellite clinics, MHICM storefronts, MHICM offices, or home visits. Includes clinical and administrative services provided to MHICM patients by MHICM staff. Additional stop codes may not be taken for the same workload.
GENERAL TEAM CASE MANAGEMENT	564	2311.00	10/1/99	Records visits with patients and/or their families or caregivers by members of a case management team performing mental health community case management at all locations. Includes administrative and clinical services provided to patients by team members. NOT to be used for visits by MHICM teams (see DSS Identifier 552) or for case management by individuals who use other stop codes.
MENTAL HEALTH INTENSIVE CASE MANAGEMENT (MHICM) GROUP	567	2314.00	10/1/02	Only VA medical centers approved to participate in MHICM (previously IPCC) programs monitored by NEPEC may use this code. This records group visits with patients and/or their families or caregivers by MHICM staff at all locations including VA outpatient or MHICM satellite clinics, MHICM storefronts, MHICM offices, or home visits. Includes clinical and administrative services provided to MHICM patients by MHICM staff. Additional stop codes may not be taken for the same workload.

ATTACHMENT A-B: MHICM TREATMENT POPULATION ESTIMATE FOR PLANNING PURPOSES

Note: This is the original table from the Directive appendix

	Population Statistics			Discharged Psychiatric Inpatients (1)			Seriously Mentally Ill MH Outpatients			Psychiatric Complex VERA Class Patients (CMI)				Long-Term Inpatients (>1 yr LOS)		
VISN	Total Veterans	Eligible for VA Services	SC for MH Problem	Total Psychiatric Inpatients (1)	Percent Inpatients Eligible for MHICM (2)	Number Inpatients Eligible for MHICM (2)	Total SMI Out-patients (3)	Percent Out Pt's with 6 OP MH Visits (4)	Number Out Pt's with 6 OP MH Visits (4)	Schizophrenia and Dementia	Other Psycho-sis	PTSD	Total	Bed Psych.	Sections Med/ Surg	Total
1	1,500,892	358,094	32,435	5,204	30.9%	1,606	14,489	56.7%	8,220	926	324	435	1,685	94	20	114
2	697,421	194,415	12,296	2,355	41.8%	985	6,699	59.1%	3,961	440	171	200	811	18	0	18
3	1,595,593	335,211	29,644	4,716	45.9%	2,166	13,823	60.4%	8,348	1,250	377	505	2,132	196	23	219
4	1,819,870	497,402	27,526	5,047	35.7%	1,801	14,315	53.5%	7,660	930	295	465	1,690	51	9	60
5	857,564	168,218	9,715	3,405	29.3%	998	7,521	57.3%	4,310	502	112	365	979	62	13	75
6	1,251,189	360,885	22,017	4,936	30.1%	1,487	8,955	44.9%	4,023	501	149	319	969	64	1	65
7	1,367,528	399,439	25,458	4,888	29.1%	1,422	13,664	51.0%	6,967	790	175	569	1,534	67	43	110
8	1,634,357	482,839	43,852	5,083	18.3%	931	22,052	43.8%	9,658	440	247	506	1,193	0	0	0
9	1,060,416	367,654	21,666	4,246	21.9%	931	10,626	42.2%	4,481	391	136	169	696	65	0	65
10	1,151,473	318,983	16,861	3,993	32.9%	1,314	9,416	60.4%	5,691	720	196	372	1,288	4	0	4
11	1,651,186	427,356	18,906	4,240	24.2%	1,025	10,279	44.1%	4,528	849	188	284	1,321	193	25	218
12	1,362,314	319,235	15,530	4,372	39.8%	1,739	10,012	57.7%	5,773	606	368	410	1,384	70	0	70
13	707,005	210,110	11,153	2,533	40.9%	1,036	6,890	63.1%	4,346	317	173	190	680	1	0	1
14	516,075	153,798	6,675	1,711	41.2%	705	3,826	45.3%	1,732	194	102	140	436	0	0	0
15	1,071,604	329,293	15,963	4,152	27.3%	1,132	11,016	47.5%	5,229	540	277	342	1,159	7	0	7
16	1,887,301	651,983	39,737	6,995	30.9%	2,163	17,424	45.1%	7,865	877	256	534	1,667	1	0	1
17	1,026,699	321,378	17,795	3,727	37.4%	1,394	9,412	43.0%	4,046	669	314	404	1,387	169	1	170
18	842,132	276,151	15,687	2,833	18.0%	511	9,182	53.9%	4,945	152	118	274	544	0	0	0
19	731,842	215,445	11,835	2,490	34.1%	850	8,137	59.9%	4,876	317	195	337	849	0	0	0
20	1,191,422	342,926	21,245	4,444	32.7%	1,452	10,381	54.9%	5,702	301	227	416	944	0	0	0
21	1,418,772	338,504	19,259	3,292	38.2%	1,257	11,108	60.2%	6,689	518	263	524	1,305	0	0	0
22	1,841,007	418,847	20,114	3,627	29.5%	1,069	17,070	55.5%	9,478	713	463	364	1,540	1	0	1
TOTAL	27,183,662	7,488,166	455,369	88,289	31.7%	27,974	246,297	52.18%	128,528	12,943	5,126	8124	26,193	1,063	135	1,198
AVG	1,235,621	340,371	20,699	4,013	32.3%	1,272	11,195	52.70%	5,842	588	233	369	1,191	48	6	54
STD	397,725	113,743	9,168	1,171	7.4%	425	4,042	6.80%	1,982	268	93	121	420	63	11	70
CV	0.32	0.33	0.44	0.29	0.23	0.33	0.36	12.90%	0.34	0.46	0.40	0.33	0.35	1.30	1.85	1.28

(1) Discharged from Psychiatric bed sections, or other acute bed sections, or Domiciliary care with psychiatric primary diagnosis (excluding addictive disorders).

(2) Either greater than 30 bed days of care per year OR 3 or more admissions.

(3) Diagnosis of schizophrenia, major affective disorder, or bipolar disorder (ICD-9 codes 295.00-296.99).

(4) The official definition of an SMI patient in VA's capacity monitoring requires 6 or more OP visits per year.

Appendix B
MHICM Planning Material and Checklists

July 23, 2004

Director, NEPEC / VA MHICM/IPCC Project Director

MHICM Planning Guidelines

Facility or VISN Representative

1. Thank you for your interest in VA Mental Health Intensive Case Management (MHICM) programs (formerly known as Intensive Psychiatric Community Care or IPCC). In response to many inquiries about MHICM teams, we have assembled this package of materials and guidelines to help VA facility and network level planners evaluate the benefits of implementing an MHICM team. It includes:

A. Descriptive materials: 1) summary of the program s history and scientific foundation; 2) summary of the program s mission, objectives, and monitoring domains; 3) brief bibliography; 4) list of current MHICM teams.

B. Standards and Implementation Checklist: 1) outline of minimum standards and expectations for starting an MHICM team; 2) MHICM implementation checklist.

C. Report and literature: 1) FY 2002 NEPEC MHICM report; 2) 1998 IPCC outcomes paper.

2. **Would you like to learn more about Mental Health Intensive Case Management (MHICM)?**

To learn more about the history, principles, and outcomes of MHICM, review the descriptive materials and literature and VHA Directive 2000-034, "Mental Health Intensive Case Management", available at http://vaww.va.gov/publ/direc/health/direct/12000034.htm and Appendix A of the MHICM Annual Report.

3. **Are you interested in starting an MHICM team at your facility or in your VISN?**

To learn more about key elements of an MHICM team, review the enclosed minimum standards and the MHICM implementation checklist.

4. **Have you considered reconfiguring an existing staff unit into an MHICM team? How closely do your community services resemble MHICM?**

To compare a planned or existing program with MHICM services, review the enclosed minimum standards and complete the enclosed MHICM implementation checklist. Scoring your planned or existing community services team with the checklist will help us know how best to work with you.

5. **Could an MHICM team improve mental health services at your facility? Could NEPEC training and monitoring enhance the effectiveness or efficiency of an existing team?**

NEPEC publishes an annual report on MHICM teams with extensive information on program operation, as well as scientific papers in peer-reviewed journals. To learn more about NEPEC monitoring of MHICM teams, look at Chapter 2 in the FY 2002 report for tables on MHICM client characteristics, program structure, service delivery, clinical outcomes, and costs. Appendix A includes VHA Directive 2000-034, which defines MHICM services and monitoring. Appendix D provides a legend for each table. To learn more about MHICM outcomes, review the clinical and cost data from the Archives of General Psychiatry paper on the original IPCC experimental evaluation.

6. **Would you like NEPEC=s assistance with starting or reconfiguring a team, training staff, or monitoring outcomes at your facility?**

To request consultation and training to establish an MHICM team, to reconfigure an existing program to MHICM, or to include an existing community treatment team in NEPEC national monitoring, please send a completed copy of the enclosed MHICM Implementation checklist to:

Robert Rosenheck MD
Northeast Program Evaluation Center (NEPEC)/182
VA Connecticut Healthcare System
950 Campbell Avenue, West Haven, CT 06516
203-937-3850.

7. Thanks again for your interest in MHICM services for veterans with serious mental illness.
We hope the enclosed materials are helpful to you.

Robert Rosenheck, M.D.
Director, NEPEC

Michael Neale, Ph.D.
VA MHICM Project Director

What is MHICM?

VHA Mental Health Intensive Case Management (MHICM) teams provide community-based psychiatric and rehabilitation services to veterans with serious mental illness who are among the most frequent and long-term users of VA inpatient mental health resources. MHICM services are characterized by high staff -client ratios, shared caseloads, assertive outreach, frequent contact in community settings, a practical problem-solving approach, and high continuity of care. Interdisciplinary teams assume primary care responsibility and provide individualized care to help veterans: 1) reduce inpatient mental health service use and cost; 2) improve community adjustment and quality of life; and 3) enhance satisfaction with services. All MHICM veterans and staff participate in standardized national monitoring of program resources, client characteristics, service delivery, and outcomes in collaboration with the Northeast Program Evaluation Center (NEPEC). Evaluation and monitoring data have demonstrated the clinical and cost effectiveness of MHICM.

MHICM services are based on principles and standards of assertive community treatment (ACT), which has been identified as an evidence-based practice for people with serious mental illnesses. VHA Directive 2000-034 defines MHICM services and monitoring within VA. Cost effectiveness studies have shown that MHICM can be effective and efficient in the VA system. MHICM staffing standards (at least 3-4 FTEE) represent a minimum relative to published ACT standards (i.e., 8-15 FTEE). A MHICM team should have sufficient staff to provide the comprehensive, intensive community-based services the standards suggest. Because MHICM teams are less richly staffed than standard ACT teams, there are occasions when clients must be referred for day treatment, medical, substance abuse, or vocational services. On the other hand, location of MHICM teams within integrated VA mental health service systems allows most veterans to receive a range of services with continuous team support and minimal fragmentation.

The eighty-five teams currently providing MHICM services to 4,200 veterans in 39 states nationwide are listed on the next page.

Robert Rosenheck MD
Director, NEPEC
Michael Neale PhD
Associate Director, NEPEC
MHICM Project Director

Northeast Program Evaluation Center (NEPEC)/182
VA Connecticut Healthcare System
950 Campbell Avenue, West Haven, CT 06516
203-937-3850.
VA Intranet: http://vaww.nepec.mentalhealth.med.va.gov
Internet: http://www.nepec.org

VHA Mental Health Intensive Case Management (MHICM) Teams (June, 2004)

AL:	Birmingham
	Tuscaloosa
	Tuskegee
AR:	Little Rock
AZ:	Phoenix
CA:	Greater Los Angeles
	Loma Linda
	Long Beach
	Palo Alto
	San Diego
	San Francisco
CO:	Denver
	Grand Junction
	Southern Colorado
CT:	West Haven
DC:	Washington
FL:	Gainesville
	Miami
	Tampa
GA:	Atlanta
	Augusta
ID:	Boise
IL:	Chicago (West Side)
	Danville
	North Chicago
IN:	Northern Indiana (Marion/Ft. Wayne)
IA:	Central Iowa (Knoxville/Des Moines)
	Iowa City
KS:	Eastern Kansas (Topeka)
LA:	New Orleans
ME:	Togus
MD:	Baltimore
	Perry Point
MA:	Bedford
	Brockton
MI:	Ann Arbor
	Battle Creek
	Detroit
MN:	Minneapolis
	St. Cloud
MS:	Gulf Coast (Biloxi/Gulfport)
MO:	St. Louis
MT:	Fort Harrison
NE:	Omaha
NJ:	New Jersey (East Orange/Lyons)
NM:	Albuquerque
NY:	Albany
	Brooklyn
	Buffalo
	Canandaigua
	Hudson Valley (Montrose/Castle Pt.)
	Northport
	Syracuse
NC:	Fayetteville
	Salisbury
OH:	Chillicothe
	Cincinnati
	Cleveland
	Columbus
	Dayton
	Mansfield
	Youngstown
OR:	Portland
	Roseburg
PA:	Coatesville
	Lebanon
	Philadelphia
	Pittsburgh
SC:	Charleston
	Columbia
TN:	Mountain Home
TX:	Dallas
	Houston
	San Antonio
	Waco
UT:	Salt Lake City
VA:	Hampton
	Salem
WA:	American Lake
	Seattle
	Spokane
WI:	Madison
	Milwaukee
	Tomah
WY:	Sheridan

What is the history and success of MHICM?

Mental Health Intensive Case Management (MHICM) programs represent the adaptation, within VA, of **assertive community treatment (ACT)**, a model developed in the 1970's by Arnold Marx, Leonard Stein, and Mary Ann Test in Madison, Wisconsin (1-6). ACT is one of the most heavily researched psychiatric services for people with serious mental illness, recently recommended as a state of the art intervention by the Schizophrenia Patient Outcomes Research Team (PORT) study (7). The intent of ACT developers was to make the comprehensive services and support of an inpatient unit available to outpatients in the community, integrated within a single team. ACT helps people to reduce psychiatric inpatient hospital use and improve community adjustment, quality of life, and satisfaction with services (8-11). Implementation data further demonstrate that the success of a given ACT team is influenced by team fidelity to the model, staff cohesiveness, and host agency support for outpatient treatment (12-15). In 1998, the National Alliance for the Mentally Ill (NAMI) adopted the Madison ACT model as a central element of its national anti-stigma campaign.

Initially funded as a regional mental health demonstration program in 1987, nine original MHICM teams were compared via experimental design with standard VA aftercare services. Two-year findings revealed that MHICM veterans had significantly fewer hospital days and lower costs overall than veterans receiving standard VA treatment. Clinically, MHICM veterans scored significantly lower in psychiatric symptoms, and higher in functioning and satisfaction with services (16-17). Five-year outcomes showed sustained reductions in hospital use and improvements in psychiatric symptoms, functioning, and personal well-being for MHICM clients (18). Compared to a randomly assigned control group, 454 MHICM veterans averaged 158 fewer hospital days over five years. After accounting for program costs, the nine MHICM programs were responsible for VA cost reductions estimated at $12.8 million, or $2.6 million per year. The program was most successful at facilities that adhered to the model and showed performance improvements in other areas as well (15).

With the demonstration s success, 30 new MHICM teams were funded in 1994-95 as part of a national VA initiative that used successful teams as mentors for developing programs. System-wide monitoring data (FY 1997-98) indicate that: 1) MHICM programs serve veterans with severe, long-standing disabilities (77% psychotic diagnosis; 58% hospitalized for more than two years; mean of 135 hospital days in year preceding entry; 47% funds managed by representative payee); 2) MHICM staff provide frequent, continuous services in the community; 3) MHICM veterans show substantial reductions in hospital use (mean 87 days per veteran during the first twelve months of treatment) with commensurate reductions in inpatient costs ($74.4 million for 1659 veterans treated for twelve months); and 4) MHICM veterans show significant improvements in symptoms, functioning, quality of life, and satisfaction after six months in the program (18-19).

MHICM offers a tested and effective model for community-based treatment and rehabilitation of veterans with serious mental illness who are high users of VA psychiatric inpatient resources. It is consistent with principles underlying VA s recent reorganization that emphasize novel outpatient delivery systems, enhanced accessibility, customer satisfaction, and cost savings. On the basis of MHICM s demonstrated effectiveness, the Mental Health Strategic Healthcare Group (MHSHG) and the VA Under Secretary s Special Committee for Severely Chronically Mentally Ill Veterans (SMI Committee) have encouraged NEPEC to assist VA facilities and networks with MHICM team development by providing training, technical assistance, and monitoring.

What are the minimum standards for an effective MHICM team?

Successful implementation of MHICM requires the following explicit administrative commitments, warranted by past experience and the relative resource intensity of MHICM services:

' Target veterans with **serious mental illnesses** and **impaired community functioning** (typically psychotic disorders, with or without accompanying substance abuse) who are **high utilizers of VA inpatient, residential, or crisis mental health services** (for whom traditional services have not resulted in stable community adjustment);

' Provide a dedicated staff of **at least four clinicians** including at least one nurse as well as psychiatric and office support. Larger teams staff have generally proven to be more effective and enduring.

' Promote **team cooperation and morale** to enhance efficiency and continuity (crucial to team success);

' Identify a **team leader** whose duties include liaison with VA and community representatives, supervision of MHICM staff, and delivery of clinical services in the community;

' Support **frequent client contact** and **delivery of clinical services in the community**, including in vivo assessment, medication delivery, skills training, and rehabilitation services.

' Assure **off-hours team access** for guidance of inpatient and emergency clinical staff;

' Provide **ancillary resources** for safe and efficient community services, including:
fixed, economical **team space**, at or near the medical center/clinic;
dedicated **vehicles** for daily community visits by each clinician;
dedicated **communication technology** (beepers, cell phones) to assure staff and client safety;
electronic **office technology** (computers, copier, answering machine, fax machine) for organizing, charting, and monitoring clinical work;

' Establish **integrated links** between the MHICM team and other mental health / rehabilitation services (inpatient, outpatient, and community) to enhance service coordination;

' Maintain a **clear line of authority**, with the team leader represented in the mental health service or product line; and

' Assure **quality and accountability through monitoring** of program effectiveness and cost.

Program Objectives and Principles

MHICM services are delivered by integrated, multidisciplinary teams and are based on the Substance Abuse Mental Health Services Administration (SAMHSA) ACT standards. MHICM teams seek to deliver high quality services that:

- provide intensive, flexible community support;
- improve health status (reduce psychiatric symptoms & substance abuse);
- reduce psychiatric inpatient hospital use and dependency;
- improve community adjustment, functioning, and quality of life;
- enhance satisfaction with services; and
- reduce treatment costs.

To accomplish these objectives, MHICM teams adhere to four core treatment elements:

- Intensity of Contact. High intensity of care primarily through home and community visits, with low caseloads (seven to fifteen veterans per clinician), allowing rapid attention to crisis and development of community living skills to prevent crisis in this exceptionally vulnerable population.
- Flexibility and Community Orientation. Flexibility and community orientation with most services provided in community settings and involving integration with natural support systems whenever possible (e.g., family members, landlords, employer).
- Rehabilitation Focus. Focus on rehabilitation through practical problem solving, crisis resolution, adaptive skill building, and transition to self-care and independent living where possible.
- Continuity and Responsibility. Identification of the team as a "fixed point of clinical responsibility" providing continuity of care for each veteran, wherever the veteran happens to be, for at least one year, with subsequent care subject to review of continuing need for intensive services.

VHA Directive 2000-034 establishes procedural guidelines for MHICM teams, operationalized in eight **minimum program standards** that serve to complement the critical performance monitors.

Minimum standard	Threshold value
Percent of veterans with psychotic diagnosis at entry	*(50% or more)*
Percent of veterans with 30 or more psychiatric inpatient days in year before entry	*(50% or more)*
Mean adjusted face-to-face contacts per week/veteran	*(1.0 or more)*
Ratio of veterans to clinical FTEE (mean caseload)	*(7:1 to 15:1)*
Percent of veterans for whom at least 60% of contacts occur in community setting	*(50% or more)*
Percent of veterans receiving psychiatric rehabilitation or skills training services	*(25% or more)*
Percent of veterans discharged from MHICM program	*(< 20%)*
Number of clinical service providers on the team	*(4.0+ FTEE).*

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VA MENTAL HEALTH INTENSIVE CASE MANAGEMENT (MHICM) TEAM IMPLEMENTATION CHECKLIST FOR FY 2003 ANNUAL REPORT

September 15, 2003

This is a checklist of primary criteria and recommended operational standards for use in evaluating a current MHICM team. The checklist is based on current VA criteria for MHICM teams and published CARF standards for Assertive Community Treatment (ACT). All program elements should be in place within the first year of team development. **Please indicate whether each element is in place for your team at the end of FY 2003. If ANo@, briefly identify a reason or obstacle to be addressed. Record site identification data and general comments or questions below and return with your team's FY 2003 Annual Report by November 15, 2003. If you have questions about checklist items, please call Mike Neale Ph.D., VHA MHICM Project Director at 203.932.5711x3696. Thank you.**

Site Identification Data:

Submitting Facility/VISN: _____

Contact Person/Title: _____

Phone: _____ Fax: _____

Address: _____

_____

_____

Alternate Contact Person/Title: _____

Phone: _____ Fax: _____

Current MHICM FTEE? _____ Current MHICM team caseload? _____

Current MHICM vehicles? _____ Percent of staff time spent in community? _____

General Comments, Questions:

VA MENTAL HEALTH INTENSIVE CASE MANAGEMENT (MHICM) TEAM IMPLEMENTATION CHECKLIST

September 15, 2003

PRIMARY PROGRAM CRITERIA:

Element	In Place/Planned?	Why Not?
I. MHICM Target Population		
MHICM veterans will meet all five of the following admission criteria:		
1. diagnosis of severe and persistent mental illness (e.g., schizophrenia, bipolar disorder, major affective disorder, severe PTSD) with or without substance abuse;	Yes__ No__	
2. severe functional impairment (i.e., veteran is not currently capable of successful and stable maintenance in a community living situation or participation in necessary treatment without intensive support);	Yes__ No__	
3. inadequately served by or unable to achieve a stable community adjustment with conventional clinic-based outpatient treatment or day treatment; and	Yes__ No__	
4. high hospital use (i.e. 30 or more days or 3 or more episodes of psychiatric inpatient care in the year preceding MHICM admission).	Yes__ No__	
5. clinically appropriate for MHICM rather than inpatient care.	Yes__ No__	
II. MHICM Program Description		
1. MHICM services will be delivered by an integrated, multi-disciplinary team	Yes__ No__	
with a minimum of 4.0 designated clinical FTE	Yes__ No__	
who provide services in the community.	Yes__ No__	

Element	In Place/Planned?	Why Not?

II. MHICM Program Description (continued):

Core Elements (continued)

2. MHICM services will be characterized by five core treatment elements, including:

A. high intensity of care (primarily through home & community visits) Yes__ No__
with low caseloads (7-15 veterans per 1.0 clinical FTE), Yes__ No__
rapid attention to crisis and Yes__ No__
development of community living skills to prevent crisis; Yes__ No__

B. flexibility & community orientation with most services provided in community settings and involving Yes__ No__
natural support systems (family, landlord, employer) whenever possible; Yes__ No__

C. focus on rehabilitation through practical problem solving, crisis resolution, adaptive skill building, and transition to self-care and independent living where possible; Yes__ No__

D. identification of the team as a fixed point of clinical responsibility Yes__ No__
providing continuity of care for each veteran wherever s/he happens to be, for a prolonged period (initially 1 year, then based on periodic review of continuing need for services); and Yes__ No__

E. appropriate transition to standard care or lower intensity MHICM treatment Yes__ No__
when a veteran is: clinically stable, not abusing addictive substances, not relying on inpatient/ER services, capable of maintaining self in a community living situation, and independently participating in necessary treatments. Yes__ No__

III. Accountability

Each MHICM team/clinician will:

1. Utilize national DSS identifiers to designate MHICM workload; Yes__ No__
2. Maintain fidelity to MHICM operating principles and evidence-based clinical procedures; and Yes__ No__

Element	In Place/Planned?	Why Not?
III. Accountability (continued)		
3. Provide complete and timely MHICM monitoring information, including:	Yes__ No__	
A. Standard Intake Data Form (IDF) completed with all new admissions,	Yes__ No__	
B. Follow-Up Data Form (FDF) completed with each program veteran at 6 months and annually after entry,	Yes__ No__	
C. Clinical Progress Report (CPR) completed by each veteran s primary case manager at 6 months and annually after entry,	Yes__ No__	
D. FTE/Caseload Report completed monthly by the team leader,	Yes__ No__	
E. Log of veterans treated, with entry / discharge dates, and dates for completing monitoring data.	Yes__ No__	
F. Brief annual progress report on program developments, staffing, workload, projected/actual expenditures, including standards and fidelity checklists, due on November 15th each year,	Yes__ No__	
RECOMMENDED OPERATIONAL STANDARDS		
IV. Staffing		
1. Full-time team leader with master's level degree in mental health field (social work, psychology, nursing, counseling/guidance, rehabilitation) and 2000 hours (2 years) of post-degree treatment of people with serious mental illness.	Yes__ No__	
2. Minimum of eight hours (.20 FTE) psychiatrist time for every 50 vets.	Yes__ No__	
3. Minimum of 1.0 FTE RN and clearly designated, accessible nursing backup.	Yes__ No__	
4. Minimum of three-fourths of clinical staff with at least a bachelor's degree in a mental health field.	Yes__ No__	
5. Physician/nurses collaborate with other clinical staff to manage a system for prescribing/administering medications.	Yes__ No__	
6. One or more staff designated to organize daily planning of team activities.	Yes__ No__	
7. One or more staff with team chart auditing (QA) responsibilities.	Yes__ No__	

Element	In Place/Planned?	Why Not?
V. Hours of Coverage and Access		
1. Team identifies regular hours of service with at least 8 hrs on 5 days/week and evening/weekend hours as appropriate.	Yes__ No__	
2. Hospital/ER staff have 24-hour, 365-day on-call access to team for crisis, admission, discharge consultation.	Yes__ No__	
VI. Communication and Daily Planning		
1. Daily, M-F team meetings to review client status and organize/assign daily work of team. Rotated leadership.	Yes__ No__	
2. Integration of individual schedules for client contact (see treatment planning), emerging client needs, and team clinical responsibilities into daily work assignment.	Yes__ No__	
3. Recording of all client services and encounters, for purposes of auditing, workload credit, and evaluation.	Yes__ No__	
4. All staff remain accessible during work hours via beeper, pager, cellular phone.	Yes__ No__	
VII. Record-keeping		
1. Charts contain basic sections: identifying data problem list; treatment plans/reviews; progress notes; intake/history; medications/ lab results/consults; hospital summaries; clinical assessments/screenings; signed correspondence/releases; & consents/ administrative.	Yes__ No__	
2. Progress notes within local guidelines re: frequency/format, including: assessments of: clinical status, danger to self/others; medication compliance; significant events & status changes; general goals/treatment planning; client/family education; location & frequency of contact; clear goals.	Yes__ No__	
3. Initial assessment done within 4 wks of entry & in chart, covering: psychiatric/ psychological (with DSM-IV diagnosis), family/other supports, instrumental ADL, vocational, housing, medical/dental, substance abuse.	Yes__ No__	

Element	In Place/Planned?	Why Not?

VII. Record-keeping (continued)

4. Treatment plan signed by multidisciplinary team in chart within 4 wks of entry and reviewed every 6 mos or as needed. Yes__ No__

VIII. Treatment Planning

1. Weekly meetings for in-depth review of client treatment plans (1-2 clients per hour mtg), including current status & priorities, strengths & needs, short & long-term goals, staff activities & assignments. Yes__ No__
2. Multi-disciplinary treatment review schedule determined weeks ahead. Yes__ No__
3. Clear leadership of meetings. Yes__ No__
4. Problems, goals, plans, & priorities all specific & interpretable, with clear staff roles and activities. Yes__ No__
5. Treatment plan tasks and goals copied to client weekly/monthly schedule, for use in daily planning. Yes__ No__
6. Treatment plan reviewed with and co-signed by client. Yes__ No__

IX. Treatment and Rehabilitation Services

7. Primary clinician assigned for each client, although team provides multi-disciplinary treatment for each client. Yes__ No__
8. Two or more staff with complementary skills / training identified on treatment plan to provide clinical services for each client. Yes__ No__
9. Team provides a broad range of services for assigned clients as clinically indicated: advocacy; coordination; assessment & monitoring of symptoms/stressors/risks/ coping/med compliance/activities/ skill levels; planning; help/skills training for daily tasks (ADLs, shopping); family support/education, and crisis intervention (see treatment plans). Yes__ No__
10. Team initially sees each client for 2-3 substantial contacts per week on average with more frequent direct or phone contact as clinically indicated. Yes__ No__

Element	In Place/Planned?	Why Not?
IX. Treatment and Rehabilitation Services (continued)		
11. On a typical working day, at least 20% of clients are seen.	Yes__ No__	
12. Clinicians spend 50-75% of work time providing treatment / rehabilitation services in community settings.	Yes__ No__	
13. Team serves as fixed point of clinical responsibility with a long-term commitment to care of each client as clinically indicated. Initial expectation is for at least one year.	Yes__ No__	
14. Team assumes primary clinical responsibility for assigned clients.	Yes__ No__	
X. Assessments		
1. Assessments in charts (see IV-19).	Yes__ No__	
2. Assessments completed by members of multi-disciplinary team, considering specific training or expertise: Psychiatric..psychiatrist Vocational..team professional staff, voc rehab specialist ADL..team professional staff Leisure time..team professional staff Family..team professional staff Medical..RN/MD	Yes__ No__	
XI. Admission / Discharge Criteria		
1. Admission criteria are clearly stated in policy statement and communicated to referring services, including client willingness to participate (i.e., signed releases, consents).	Yes__ No__	
2. Criteria for discharge or transition to lower intensity services are clearly stated in policy statement, including: clinically stable, not abusing addictive substances, not relying on extensive inpatient or emergency services, capable of maintaining self in a community living situation, and independently participating in necessary treatments.	Yes__ No__	

Element	In Place/Planned?	Why Not?

XII. VA, Community Agency, Client Relationships

1. Meetings are held periodically with leaders of VA & community services to introduce MHICM staff, review policies & procedures, and gain cooperation. E.g., VA: inpatient/outpatient mental health units/services, ER/admitting staff, security, engineering, pharmacy, volunteer service, patient advocate, benefits counselor, VSOs. E.g., Community: ER, psychiatric/detox units, psychosocial clubs, vocational rehabilitation, police, housing authority, residential facilities, crisis intervention. Yes__ No__
2. If vocational rehabilitation staff are not on team, liaison exists with voc rehab service/agency to perform assessments, provide training & support. Yes__ No__

XIII. National Evaluation Requirements

1. Clients are included in planning and evaluating team services, as clinically appropriate. Yes__ No__
2. Team completes a brief annual progress report on program developments, staffing, workload, projected/actual expenditures, including standards and fidelity checklists, due on November 15th each year. Yes__ No__
3. Each team maintains a log of veterans treated, with entry/discharge dates, and dates for completion of monitoring data. Yes__ No__
4. Designated clinician completes standard outcomes monitoring form at intake and 6 and 12 months after entry, and annually thereafter, for each veteran. Yes__ No__
5. Designated clinician or team completes clinical progress report form every 6 months after entry, for each veteran. Yes__ No__

Assertive Community Treatment Fidelity Scale

Please complete all items without an "X" for this edited scale.
The scale and contact sheet are on six pages.

Form A (1)

VA Facility Name: _____

1. Five-Digit Facility code ___ ___ ___ . ___ ___ (6)

Local name of the Team/Program:

_____ ___ ___ (8)

2. Target population (*list one letter from the categories below*) ..... _____ (9)
   A. Seriously mentally ill veterans (non substance abuse)
   B. Seriously mentally ill veterans (primarily substance abuse)

X3. Item deleted (leave response areas blank). x_____x (10)

x___ ___x (12)

X4. Item deleted (leave response areas blank).

x_____x (13)

X5. Items deleted (leave response areas blank).

x___ ___ . ___ ___x (17)
x___ ___ . ___ ___x (21)
x___ ___ . ___ ___x (25)
x___ ___ . ___ ___x (29)
x___ ___ . ___ ___x (33)
x___ ___ . ___ ___x (37)
x___ ___ . ___ ___x (41)

6. Regarding your clients:

x___ ___x (43)

A. How many veterans are currently in treatment in this program? ..... ___ ___ ___ (46)

B. How many veterans is the program designed to treat when it is operating at full capacity? ..... ___ ___ ___ (49)

X7. Item deleted (leave blank). x$___ ___ ___ ___ ___ ___ ___x (56)

X8. Items deleted (leave response areas blank).

x___ ___ ___x (59)
x___ ___ ___x (62)
x___ ___ ___x (65)

9. In what year was the program first implemented? ..... 19 or 20 ___ ___ (67)

Answer the following with the categories directly beneath the question.

10. What is the caseload of your program? ..... _____ (68)
    A. 10 or fewer clients per clinician
    B. 11—20 clients per clinician
    C. 21—34 clients per clinician
    D. 35—49 clients per clinician
    E. 50 or more clients per clinician

11. What percent of clients have contact with more than one staff member in a given week? ..... _____ (69)
    A. 90% or more
    B. 64—89%
    C. 37—63%
    D. 10—36%
    E. 10% or fewer

12. How frequently do the team members meet to plan or review services for each client? ..... _____ (70)
    A. Program meets 4—5 days/week and usually reviews each client, even if only briefly
    B. Program meets 2—3 days/week and usually reviews each client, even if only briefly
    C. Program meets 1 day/week and usually reviews each client, even if only briefly
    D. Program meets 1 day every other week and usually reviews each client, even if only briefly
    E. Program meets 1 day per month or less and usually reviews each client, even if only briefly

13. How much of the time does the program's supervisor /director/coordinator provide services to clients? ..... _____ (71)
    A. Normally, at least 50% of the time
    B. Normally, between 25% and 50% of the time
    C. Routinely as backup, or normally less than 25% of the time
    D. On rare occasions as backup
    E. Supervisor provides no direct services to clients

14. How much staff turnover has the program experienced in the *past two years*? ..... _____ (72)
    A. Less than 20%
    B. 20—39%
    C. 40—59%
    D. 60—80%
    E. More than 80%

15. At what percent of full staffing has the program been operating for the *past twelve months*? ..... _____ (73)
    A. 95% or more
    B. 80—94%
    C. 65—79%
    D. 50—64%
    E. less than 50%

16. Does the program have a defined target population and explicit admission criteria? ..... _____ (74)

A. The program actively recruits a defined population and all cases comply with explicit admission criteria.
B. The program typically actively seeks and screens referrals carefully, but occasionally bows to organizational pressure.
C. The program makes an effort to seek and select a defined set of clients, but accepts most referrals.
D. The program has a generally defined mission, but the admission process is dominated by organizational convenience.
E. The program has no set criteria and takes all types of cases, as determined outside the program.

17. Over the past six months, the highest monthly *intake* rate (that is, how many new clients have been admitted to the program) per month has been:..... _____ (75)

A. No greater than 6 per month
B. 7—9 per month
C. 10—12 per month
D. 13—15 per month
E. 16 or more per month

18. Which of the following five types of treatment services does your program offer? (*Check all that apply*)

A. Counseling/psychotherapy ..... _____ (76)

B. Housing support ..... _____ (77)

C. Substance abuse treatment ..... _____ (78)

D. Employment/ vocational rehabilitation ..... _____ (79)

E. Rehabilitative services ..... _____ (80)

19. What role does the program have in providing crisis services to its clients?..... _____ (81)

A. The program provides 24 hour coverage
B. The program provides emergency service backup; e.g., program is called, makes a decision about need for direct program involvement.
C. The program is available by telephone, predominately in a consulting role.
D. Emergency service has program-generated protocol for program clients.
E. The program has no responsibility for handling crises after hours.

20. In what percent of hospital admissions of program clients are staff involved in the decision to admit? ..... _____ (82)

A. 95% or more
B. 65—94%
C. 35—64%
D. 5—34%
E. 4% or less

21. In what percent of hospital discharge plans for program clients are program staff involved in developing the plan (planned jointly or in cooperation with the hospital staff)? ..... _____ (83)

A. 95% or more
B. 65—94%
C. 35—64%
D. 5—34%
E. 4% or less

22. What percent of program clients are discharged from the program within one year of program entry? ..... _____ (84)

A. 6% or fewer
B. 6—17%
C. 18—37%
D. 38—90%
E. 91% or more

23. What percent of time with clients is spent in the community (rather than in the office)? ..... _____ (85)

A. 80% or more
B. 60—79%
C. 40—59%
D. 20—39%
E. 19% or less

24. What percent of the team caseload is retained over a twelve month period? ..... _____ (86)

A. 95% or more
B. 80—94%
C. 65—79%
D. 60—64%
E. 59% or less

25. Does the program use street outreach and/or legal mechanisms (such as representative payees, probation/parole, outpatient commitment) to engage clients, as clinically indicated? ..... _____ (87)

A. The program has a strategy that includes street outreach and legal mechanisms whenever appropriate
B. The program has a strategy and uses most of the mechanisms that are available
C. Program attempts outreach but uses legal mechanisms only as convenient
D. Program makes initial attempts to engage but generally focuses efforts on most motivated clients.
E. The program almost never uses street outreach.

26. On average, how much service time does each client receive per week? ..... _____ (88)

A. 2 hours or more
B. 85—119 minutes
C. 50—84 minutes
D. 15—49 minutes
E. 14 minutes or less

27. On average, how many service contacts are made with each client per week? ..... _____ (89)

A. 4 or more per week
B. 3 per week
C. 2 per week
D. 1 per week
E. less than 1 per week

28. For clients who have a support network, such as family, landlords, or employers, on average how many staff contacts are made with members of support network per month? ..... _____ (90)

A. 4 or more per month
B. 3 per month
C. 2 per month
D. 1 per month
E. less than 1 per month

29. For clients with a substance use disorder, how many minutes per week of substance abuse treatment do they receive from program staff? ..... _____ (91)

A. 24 minutes per week or more
B. 17—23 minutes per week
C. 10—16 minutes per week
D. 3—9 minutes per week
E. 2 minutes per week or fewer

30. What percent of clients with a substance use disorder attend group treatment that is provided by program staff? ..... _____ (92)

A. 50% or more
B. 35—49%
C. 20—34%
D. 5—19%
E. 4% or fewer

31. For clients with both serious psychiatric illness and a substance use disorder, to what extent does the program employ an integrated "dual disorders" model that is stage-wise, non-confrontational, follows behavioral principles, considers interactions of mental illness and substance abuse, and has gradual expectations of abstinence) ? . _____ (93)

A. The program is fully based on such DD treatment principles, with treatment provided by program staff
B. The program primarily uses such a DD model, with some substance abuse treatment provided outside the program
C. The program uses a mixed model, including both DD and non-DD principles
D. The program uses primarily a traditional model
E. The program is fully based on a traditional model

32. What DSS Identifiers (formerly called "stop codes") are used to document the work of this program?

A. First DSS identifier (typically 552) ___ ___ ___ (96)

B. Second DSS identifier (typically 546) ___ ___ ___ (99)

C. Third DSS identifier (if applicable) ___ ___ ___ (102)

Contact person or Person completing this form:

Name _____

Telephone number (with area code and extension): ( ) _____ x _____

Fax number: ( ) _____

Email (Internet) Address: _____

Address information (street, building, mail stop, city, state, zip):

_____

_____

_____

If you have questions about the survey or items, please contact:
Mike Neale PhD: (203) 932-5711 x 3696

General comments accompanying the survey are welcome.

Please attach the survey to the Annual Report.

Appendix C
Outlier Review Request and Form

May 3, 2004

Director, NEPEC / VA MHICM Project Director

FY 2003 Performance and Minimum Standards Outlier Review

MHICM Program Directors, Clinical and Clerical Staff

1. DRAFT Tables 2-1 to 2-32 for the FY 2003 MHICM National Performance Monitoring Report, have been placed on the NEPEC intranet page, http://vaww.nepec.mentalhealth.med.va.gov/, for field review, along with Appendix D which provides a legend for each table and variable. We are also forwarding a copy of the relevant files by Outlook e-mail. As with the FY 2002 Report, MHICM performance and critical monitors are listed in Table 2-1 and data are presented in Adobe Reader (.pdf) format Tables 2-2 to 2-32. You may need to download a more recent version of Adobe Acrobat Reader to view or print them. A download link for the software is available on the NEPEC home page (see above). Please consult your local IRM office if necessary.

2. Please review your team's data on all tables and complete and return an outlier review for any shaded value on the monitoring and minimum standards tables. Outlier values are those for which a team's value exceeds the threshold for a critical monitor. Outliers in the *desired* direction, underlined in **bold**, require no response. Outlier values in the *undesired* direction are shaded in Tables 2-2 to 2-25 and outlined in summary tables (2-27 to 2-32) for each of the four monitoring domains (structure, client, service delivery, outcome) and the eight Minimum Program Standards.

3. **Each team is asked to review team values on all tables for accuracy and to identify each monitor or minimum standard for which the team is an outlier. For each outlier in the undesired direction, please complete an outlier review summary: 1) Identify the monitor; 2) Select a reason for outlier status; and 3) provide a brief explanation or summary of plans to correct the team value. Teams with outlier values in FY 2002 may want to consider adjusting team resources or operation to bring performance within the desired range for FY 2003.**

4. **Only negative (shaded) outliers for critical monitors indicated in the Outlier Summary Tables {Tables 2-27 through 2-32} require formal outlier response using the outlier review form provided with the FY 2002 draft tables.** Currently, that does not include outliers indicated for ACT Fidelity, Housing Independence, 6/18/24-month hospital use, IADLs, or Service Satisfaction. We have provided outlier feedback on these additional variables to assist your team in planning and to indicate areas where changes may be necessary to improve perfomance

5. If you have questions or comments about a particular measure or criterion value, please note them on the review form or send them separately. Please refer questions about the tables or outlier review to Mike Neale (203.932.5711x3696) and return the completed review forms to NEPEC by Fax (203.937.4762) or mail (NEPEC/182, VA Connecticut HCS, 950 Campbell Avenue, West Haven, CT 065176), by Tuesday, May 25th, 2004.

6. Thank you all for your dedicated efforts on behalf of veterans with serious mental illness.

(Signed)
Robert Rosenheck, M.D.

(Signed)
Michael Neale, Ph.D.

MHICM Outlier Review, FY 2003

This form asks VA Mental Health Intensive Case Management (MHICM) teams to respond to their identification as an outlier on one or more critical performance monitors and minimum program standards, based on the DRAFT FY 2003 performance tables. **Please refer to the DRAFT tables to identify all critical monitors and standards for which your team's performance fell outside desired values for an MHICM team**. For each outlier in the undesired direction, please select a primary reason and explain the situation and/or plans for remedy below.

Please submit your responses to Mike Neale PhD, VA MHICM Project Director at NEPEC, by Tuesday, May 25th, 2003. You may fax the form to 203.937.4762, mail it (Mike Neale PhD, NEPEC/182, VA Connecticut, 950 Campbell Avenue, West Haven, CT 06516, or respond via Outlook. If you have questions about specific values or the outlier review, please call Mike at 203.932.5711 x3696 or send an Outlook message. Thanks.

If you need additional pages, please make copies of the second page of this form.

MHICM SITE: _____ VA Station Code #: _____

Person completing this report: _____

Phone number: (_____) _____ ext. _____

Monitor/standard: _____

Reason for outlier status: *Please select the most important reason. If more than one applies, indicate in the narrative.*

_____ a. Legitimate differences in this site's team that do not conflict with national program goals.

_____ b. Local policies at this site that may conflict with national program goals.

_____ c. Problems in program implementation for which corrective action has been taken.

_____ d. Problems in program implementation for which corrective action has since been planned.

_____ e. Problems in program implementation for which corrective action has not yet been planned.

Explain: _____

_____

_____

_____

Copy and add more of this page as necessary VA Station Code #: _____

Monitor/Standard: _____

Reason for outlier status: *Please select the most important reason. If more than one applies, indicate in the narrative.*

_____ a. Legitimate differences in this site's team that do not conflict with national program goals.

_____ b. Local policies at this site that may conflict with national program goals.

_____ c. Problems in program implementation for which corrective action has been taken.

_____ d. Problems in program implementation for which corrective action has since been planned.

_____ e. Problems in program implementation for which corrective action has not yet been planned.

Explain: _____

_____

_____

_____

Monitor/standards: _____

Reason for outlier status: *Please select the most important reason. If more than one applies, indicate in the narrative.*

_____ a. Legitimate differences in this site's team that do not conflict with national program goals.

_____ b. Local policies at this site that may conflict with national program goals.

_____ c. Problems in program implementation for which corrective action has been taken.

_____ d. Problems in program implementation for which corrective action has since been planned.

_____ e. Problems in program implementation for which corrective action has not yet been planned.

Explain: _____

_____

_____

_____

List of Critical Monitors and Minimum Standards for Outlier Review, FY 2003 Draft Tables

Critical Monitor	Table	Column	MS#
Team Structure (Table 2-28)			
1. FTE Unfilled: more than 6 months (Y)	2-5	7	
2. Unassigned Medical Support: MD and/or RN (Y)	2-6	3	
3. Unassigned Medical Support: MD and/or RN (Y)	2-6	4	
4. Caseload Size: Mean Ratio Clients per Clinical FTEE (LT 7, GT15)	2-6	7	4
5. Team Size: # Full-time Clinical Staff (4.0+FTEE)	2-5	6	8
Client Characteristics (Table 2-29)			
6. % Clients with GTE 30 Days Hospital Yr Pre (LT 50%)	2-10	5	2
7. % Clients with Psychotic Diagnosis at Entry (GT 50%)	2-10	6	1
8. Mean GAF at Entry Exceeds 50 (GT 50)	2-11	6	
Clinical Process (Table 2-30)			
9. Tenure: % Clients Discharged (>20%)	2-12	5	7
10. Intensity: % Clients Seen GTE 1 Hour per wk (LT 1 Hr/Wk)	2-13	6	
11. Location: % Clients seen 60% or more in community (LT 50%)	2-13	7	5
12. Frequency: # Adjusted face-to-face contacts/Wk (LT 1/Wk)	2-14	9	3
13. Team provides Psychiatric Rehabilitation Services (LT 25% Vets)	2-15	6	6
Client Outcome (Table 2_31)			
14. Hospital Use: 365 Days % Change MH Days (Post-Pre Low)	2-18a	5	
15. Reported Symptoms: % Change (BSI) (High)	2-20	5	
16. Observed Symptoms: % Change (BPRS) (High)	2-19	5	
17. Quality of Life: % Change (QOL) (Low)	2-23	7	

MS#: Critical Performance Monitor is also a Minimum Standard (Table 2-32)

Appendix D
Legend for MHICM Summary Report Tables

This appendix details the source and creation of variables included in national NEPEC monitoring of the 63 MHICM teams included in the 7th MHICM National Performance Monitoring Report for FY 2003. Site-by-site values for these variables are described I Chapter 2 of the report and presented in Tables 2-1 to 2-26, Figures 2-1 to 2-6 and Appendices E-H. Text and tables are organized into domains of program structure, client characteristics, service delivery, clinical outcomes, and unit costs. Data for this report represent 4,108 veterans who received services and for whom follow-up data were available completed between October 1, 2002 and September 30, 2003. Monitors for original MHICM teams are based on data for reduced numbers of recently entered clients and may not accurately represent values for their entire client population. For each variable, outliers were identified by tests of significance ($p<0.05$) between the least square mean of the change score for a given team and the median site score. Outliers in undesired direction are indicated by shaded values and in the desired direction by **bold, underlined** values. Outliers are boxed in summary Tables 2-27 through 2-32. Team responses to outlier values are reported in Table 2-33. **Note: Sixty-three teams with 10 or more veterans who had Baseline (IDF) and Follow-up (FDF/CPR) data from "30 series" forms were included in analyses for this report.**

Table 2-1: VA MHICM Program Monitors

Column Heading	Source/Variable and Computation Description
Monitoring Domain	Area addressed by monitoring variable (Structure/Client/Process/Outcome/Cost).
Program Monitor	Monitoring variable derived from MHICM interviews, ratings, or centralized VA data.
Unit	Unit of measurement for monitoring variable.
Report Table	Number of report table presenting data on a given monitoring variable.
Program Objective	Program objective (1-6) addressed by monitoring variable (see Appendix B).
Critical Monitor	Indicator of critical status for comparison and outlier identification.

Table 2-2: MHICM Programs through FY 2003

Column Heading	Source/Variable and Computation Description
VISN	Veterans Integrated Service Network number.
Site Name	Name/Location of host facility or healthcare system.
Site Code	Host Facility Station Code, including 5-digit station code numbers for consolidated facilities.
Site Type	GM&S: General Medical and Surgical facility; NP: Former Neuro-Psychiatric facility.
MHICM Startup Year	Year team began accepting veteran clients.

Table 2-3: Allocated Staff and Funds (Original Dollars)

Column Heading	Source/Variable and Computation Description
	Source: MHSHG Resource tables
Allocated FTE	Original allocation of positions for MHICM services (excludes local contributions).
Personal Service	Original allocation of recurring Personal Service funds (salary and benefits).
All Other	Original allocation of recurring All Other funds (supplies, leased equipment).
Admin. Support	Original allocation of recurring Administrative Support funds (use at local discretion).
Total Program $	Original allocation of Total funds.
Row Heading	Computation Description
All Sites	Overall sum or mean across all individuals or MHICM teams included in the analysis.
Site Average	Team mean or average for the 63 site values presented in the table above.
Site S.D.	Standard deviation from the mean for all site values presented in the table above.

Table 2-4: FY 2003 Program Expenditures

Column Heading	Source/Variable and Computation Description
	Source: FY 2003 site-generated progress reports.
FY 03 Filled FTE	FY 2003 reported MHICM filled FTE.
FY 03 P/S Expend.	FY 2003 reported expenditure of MHICM Personal Service funds.
FY 03 AO Expend.	FY 2003 reported expenditure of MHICM All Other funds.
FY 03 Total Expend.	FY 2003 reported Total expenditure of MHICM funds.

Table 2-5: Utilization of Staff Resources

Column Heading	Source/Variable and Computation Description
	Source: September, 2002 Monthly FTE/Caseload Report
Total FTE	MHICM allocated FTE ceiling, adjusted to include locally funded positions.
FY Filled FTE	MHICM positions reported filled as of September 30, 2003.
% FTE Utilized	Percent MHICM positions reported filled as of September 30, 2003.
Sept. Clinical FTE	Positions available to provide MHICM case management services as of September 30, 2003. Shaded values are below the MHICM standard of 4.0 Clinical FTEE.
FTE Unfilled GTE 6 mos.	Yes = one or more MHICM positions unfilled for 6 or more months. Shaded values had one or more positions unfilled for 6 months or more.
Assigned non-MHICM	Yes = one or more MHICM staff detailed to non-MHICM work. Shaded values have one or more staff detailed to non-MHICM work..

Table 2-6: Clinical Staff and Caseload

Column Heading	Source/Variable and Computation Description
	Source: September, 2002 monthly FTE/Caseload Summary
Medical Support MD	Y = psychiatrist assigned to MHICM team. Shaded values indicate the team does not have an assigned psychiatrist.
Medical support RN	Y = nurse-case manager assigned to MHICM team. Shaded values indicate the team does not have an assigned nurse-case manager.
Clinical FTE	Positions available to provide MHICM case management services.
9/03 Total # Vets	MHICM veterans as of September 30, 2003.
9/03 Caseload / Clin FTE	Average number of veteran clients per clinical FTE. Shaded values indicate the mean caseload is outside MHICM standard range of 7:1 to 15:1.
Target Caseload	Min: minimum caseload ratio of 7 clients per clinical FTE (VHA Directive 2000-034). Max: maximum caseload ratio of 15 clients per clinical FTE (VHA Directive 2000-034).

Table 2-7: Demographic Characteristics of Veterans at Intake

Column/Row Heading	Source/Variable and Computation Description
	Source: Initial Data Form (IDF), Form 34.
Overall	All sites combined (N=63 teams in FY 2003 are represented in this report.)
GM&S	General medicine & surgery facilities (N=34 teams).
NP	Former neuro-psychiatric facilities (N=18 teams).
Gender	% MHICM veterans who are male or female (34: Face sheet).
Age	Mean age of MHICM veterans (34: Face).
Race	% MHICM veterans from different racial/ethnic backgrounds (34: Face).
Marital status	% MHICM veterans with different marital histories (34: Face sheet).
Combat exposure	% MHICM veterans reporting exposure to combat (34: #25).
Employment Last 3 yrs	% MHICM veterans with different employment histories in past 3 years (34: #31).

Table 2-8: Entry Criteria Information

Row Heading	Source/Variable and Computation Description
	Source: IDF 34.
Mn hospital days 1 yr pre	Mean days spent in VA hospital; year before entry (34: #17).
Inpt psych unit referral	% MHICM veterans referred for MHICM treatment directly from inpatient unit (34: #16).
Primary psych diagnosis	% MHICM veterans with a DSM-IV psychiatric diagnosis at entry (34: #21).
GTE 30 days in hospital	% MHICM veterans with 30+ psychiatric hospital days in year before entry (34: #17; PTF). *GTE means "Greater than or equal to."*
Dual diagnosis at entry	% MHICM veterans with co-morbid substance abuse diagnosis at entry (34: #21).
Diagnosis	% MHICM veterans meeting various diagnostic criteria at entry (34: #21).
Disability/Pension	% MHICM veterans receiving any compensation or disability funds (34: #26-9).
SC Disability	% MHICM veterans with VA service-connected disability (34: #26; Face).
NSC Pension	% MHICM veterans receiving VA non-service connected pension (34: #26; Face).
SSI	% MHICM veterans receiving Social Security Supplemental Income (34: #27).
SSDI	% MHICM veterans receiving Social Security Disability Income (34: #28).
Payee	% MHICM veterans with a designated representative payee for funds (34: #29).

Table 2-9: Receipt of Disability Compensation or Pension Income

Column Heading	Source/Variable and Computation Description
	Source: IDF 34.
VA Compensation %	% MHICM veterans receiving VA service-connected compensation (34: #26).
NSC Pension %	% MHICM veterans receiving non-service-connected pension (34: #26).
SSI %	% MHICM veterans receiving Social Security Supplemental Income (34: #27).
SSDI %	% MHICM veterans receiving Social Security Disability Income (34: #28).
Rep Payee %	% MHICM veterans with a designated representative payee for funds (34: #29).
Any Disability %	% MHICM veterans receiving any compensation/disability pension (34: #26-29).

Table 2-10: Entry Criteria Information by Site

Column Heading	Source/Variable and Computation Description
	Source: IDF 34.
Lifetime Hosp GT 2 yrs	% MHICM vets reporting lifetime psychiatric hospital use GT 2 yrs (34: #190).
Years since 1st Hosp	Mean years since first psychiatric hospitalization (34: #47).
GTE 30days Hosp. yr pre	% MHICM veterans with 30+ VA hospital days; year before entry (34: #17).
	Shaded values: Less than 50% of veterans have 30+ hospital days prior to entry.
	Bold values: 100% of veterans have 30+ hospital days in year prior to entry.
Psychotic Dx at Entry	% MHICM veterans with psychotic diagnosis at entry (34: #22), including: schizophrenia, schizo-affective disorder, other psychosis, and bipolar disorder.
	Shaded values: Less than 50% of veterans with diagnosis of psychosis at entry.
	Bold values: 100% of veterans have diagnosis of psychosis at entry.
Dual diagnosis	% MHICM veterans with co-morbid substance abuse diagnosis at entry (34: #21).

Table 2-11: Clinical Status at Entry

Column Heading	Source/Variable and Computation Description
	Source: Initial Data Form (IDF), Form 34.
Inpatient at Entry	% veterans entering MHICM from inpatient status (34: #16; 24: na).
Low IADL	% MHICM veterans scoring 1 or 2 on one of four Form 34 IADL items (#121,123-125).
BPRS Mean	Mean BPRS Total score (sum 18 items) at entry (34: #265-283).
	Note: "1" added to each BPRS item to conform with current reporting conventions.
GAF Mean	Average GAF score at entry (34: #284).
	Shaded values: Mean GAF score at entry is 50 or higher.

Table 2-12: MHICM Program Tenure

Column Heading	Source/Variable and Computation Description
	Source: Clinical Progress Report (CPR), Form 39; NEPEC Access files.
Total Vets	# MHICM veterans with FDF between 10/1/01 and 9/30/03 (Access/SAS).
Vets Discharged #	# Follow-up veterans discharged by program as of September 30, 2003 (Access).
Vets Discharged %	% Follow-up veterans discharged as of September 30, 2003 (#DC'd / Total # Vets).
	Shaded values: More than 20% of team veterans were discharged during the fiscal year.
Mean Days in Program	Average # Days in MHICM per veteran (FDF date minus IDF date).

Table 2-13: Pattern of Service Delivery

Column Heading	Source/Variable and Computation Description
	Source: Clinical Progress Report (CPR), Form 39; NEPEC Access files.
Total Vets	# MHICM veterans in FY 2003 (Access/SAS).
Contact Frequency	Face-to-face: % MHICM veterans with weekly or more frequent contact (39: #40).
	Telephone: % MHICM veterans with weekly or more frequent contact (39: #41).
Intensity	% MHICM veterans with GTE one hour of weekly contact (39: #45).
	Shaded values: Less than half of clients have weekly or more frequent contact.
	Bold values: More than 78% of clients have weekly or more frequent contact.
Location	% MHICM veterans with GTE 60% of contacts in the community (39: #37).
	Shaded values: Less than half of veterans have 60% or more of contact in the community.
	Bold values: 98-100% of clients have 60% or more of their contact in the community.
All Site v. Site Average	Mean value for all vets combined (N=3,566) v. site scores (N=63) in the table.

Table 2-14: Outpatient Clinic Visits

Column Heading	Source/Variable and Computation Description
	Source: VA Outpatient Clinic (OPC) stops reported b/w 10/1/01 and 9/30/03.
Total Vets seen	# MHICM veterans with a MHICM stop code during FY 2003 (Access/SAS.
Mean contacts/Vet: 12mo.	Total: Avg. sum all MHICM encounters recorded under DSS identifiers 546 & 552 per vet.
	Telephone: Avg. sum telephone encounters recorded under DSS identifier 546 per vet.
	Face-Face: Avg. sum face-to-face encounters recorded under DSS identifier 552 per vet.
Amount time in program	Mean proportion of period (10/1/01-9/30/03) veterans spent in MHICM (per site).
	Used to standardize all veterans and sites at 12 months. of program participation.
Adjusted face-face/vet	Mean face-to-face contacts, divided by the team s amount of time in program .
Adjusted face-to-face contacts/wk/vet	Mean face-to-face contacts, adjusted for each team s amount of time in program, then divided by 52 weeks to get a contacts per week value.
	Shaded values: Mean of team contact is less than 1.0 per week per veteran.
	Bold values: Mean of team contact exceeds 1 standard deviation above the mean.

Table 2-15A & B: Therapeutic Services

Column Heading	Source/Variable and Computation Description
	Source: Clinical Progress Report (CPR), Form 39.
Follow-up Vets	# MHICM veterans with FDF between October 1, 2001 and September 30, 2003.
Supportive Contact	% veterans receiving supportive contact services from MHICM (39: # 13;).
Active Monitor	% veterans receiving active monitoring services from MHICM (39: #15).
Rehabilitation	% veterans receiving rehabilitation services from MHICM (39: #16).
	Shaded values: Less than 25% of veterans receive rehabilitation services.
	Bold values: Percent of clients receiving rehabilitation services exceeds 1 standard deviation above the mean.
Psychother Relationship	% veterans receiving psychotherapeutic treatment from MHICM (39: #18).
Social/Rec Activities	% veterans in social/recreational activities organized by MHICM (39: #19).
Crisis Intervent	% veterans receiving crisis intervention services from MHICM (39: #23).
Medicatn Mgmt	% veterans whose medications were managed by MHICM (39: #24).
Medical Screen	% veterans screened for or treated for medical problems by MHICM (39: #25).
Seen for Sub. Abuse	% veterans receiving substance abuse treatment from MHICM (39: #26).
Housing Support	% veterans assisted with locating or managing housing by MHICM (39: #27).
Vocational Support	% veterans assisted with locating or maintaining a job by MHICM (39: #30).

Table 2-16: Client-Rated Therapeutic Alliance

Column Heading	Source/Variable and Computation Description
	IDF 34; Follow-up Data Form (FDF), Form 37.
	MHICM alliance at 6 mos. was compared with pre-entry alliance with primary clinician.
Pre-Entry N	MHICM veterans with IDF entry interview data on this measure.
Pre-Entry Mean	Average score for this measure at entry (34: #219-225).
Follow-up Mean	Average score for this measure at 6 months (37: #179-185), adjusted for site, time in program, baseline value, and eleven other baseline covariates.
Change at Follow-up	Least squares mean derived from analysis of covariance, including site, time in program, baseline value, and eleven other baseline covariates.
	Shaded values: Adjusted change value is significantly lower ($p<0.05$) than median site.
	Bold values: Adjusted change value is significantly higher ($P<0.05$) than median site.
Percent Change	Change at Follow-up divided by Pre-Entry Mean to get adjusted percent change.

Table 2-17: Fidelity to Assertive Community Treatment Model

Column Heading	Source/Variable and Computation Description
	DACTS self-report by sites; confirmed with other available data.
Human Resources	Average program score on 7 human resources items.
Organiz l Boundaries	Average program score on 7 organizational boundaries items.
Services	Average program score on 6 nature of services items.
Sub.Abuse Tx	Average program score on 3 substance abuse treatment items.
Total Score	Total program score: sum of 23 DACTS items.
Avg. Score	Average program score: mean of 23 DACTS items. Original DACTS contains 26 items.
	Compare VA scores to averages, NOT to totals, for non-VA programs.
	Shaded values exceed 1 standard deviation below the mean site (undesired).
	Bold values exceed 1 standard deviation above the mean site (desired).

Table 2-18: VA Hospital Use: 183 Days Before and After Program Entry

Column Heading	Source/Variable and Computation Description
	Source: PTF through 9/30/03.
Total N FY 03	# MHICM veterans as of 9/30/03.
N 183 Days	# MHICM veterans with 183 or more days in program (entered by 3/31/02).
Pre-Entry MH Days/Vet	Mean mental health hospital days per veteran in 183 days before MHICM entry.
Post-Entry MH Days/Vet	Mean mental health hospital days per veteran in 183 days after MHICM entry.
Change MH Days/Vet	Mean change in mental health hospital days (Post- minus pre-MHICM entry).
	Shaded values exceed 1 standard deviation from mean in direction of fewer days/lower %.
	Bold values exceed 1 standard deviation from mean in direction of more days/higher %.
% Change MH Days/Vet	Mean % change in mental health days (Change MH Days/Pre-IDF MH Days).
Inp t MH Per Diem FY01	Mean national inpatient mental health per diem cost (NMHPPMS): $866 [hidden col.]
Change IP MH Cost/Vet	183-day Inpatient MH reduction per MHICM veteran (Inp t MH Per Diem x Change MH Days).
	Cost change data are unadjusted for inflation and do not fully represent cost reductions achieved for veterans at original MHICM sites.

Table 2-18a: VA Hospital Use: 365 Days Before and After Program Entry
Table 2-18b: VA Hospital Use: 548 Days Before and After Program Entry
Table 2-18c: VA Hospital Use: 730 Days Before and After Program Entry

The format for these Tables is identical to that for Table 2-18, with increasing Pre- and Post-Entry time frames: a) 365 days; b) 548 days; and c) 730 days. For each table, data are reported only for veterans with sufficient time in the program to allow that Pre-Post comparison. Program entry is defined by the Initial Data Form (IDF) completion date.

Table 2-19: Brief Psychiatric Rating Scale (Observed symptoms)

Column Heading	Source/Variable and Computation Description
	IDF 34; Follow-up Data form (FDF), Form 37.
	Note: "1" added to each BPRS item to conform with current reporting conventions.
Pre-Entry N	MHICM veterans with entry interview data on this measure.
Pre-Entry Mean	Mean BPRS Total score (sum 18 items) at entry (34: #265-283).
Follow-up Mean	Mean BPRS Total score (sum 18 items) at follow-up (37: #225-243), adjusted for site, time in program, baseline value, and eleven other baseline covariates.
Change at Follow-up	Least squares mean derived from analysis of covariance, including site, time in program, baseline value, and eleven other baseline covariates.
Percent Change	Change to Follow-up divided by Pre-Entry Mean to get adjusted percent change.
	Shaded values: Adjusted change value is significantly higher ($p<0.05$) than median site.
	Bold values: Adjusted change value is significantly lower ($P<0.05$) than median site.

Table 2-20: Symptom Severity (Client-reported symptoms)

Column Heading	Source/Variable and Computation Description
	IDF 34; FDF 37 Schizophrenia Outcomes Module & Brief Symptom Inventory items (Note: Replication site variables are scaled differently and not included.)
Pre-Entry N	MHICM veterans with entry interview data on this measure.
Pre-Entry Mean	Mean symptom score at entry (34: #51-80).
Follow-up Mean	Mean symptom score at follow-up (37: #30-59), adjusted for site, time in program, baseline value, and eleven other baseline covariates.
Change at Follow-up	Least squares mean derived from analysis of covariance, including site, time in program, baseline value, and eleven other baseline covariates.
Percent Change	Change to Follow-up divided by Pre-Entry Mean to get adjusted percent change. Shaded values: Adjusted change value is significantly higher ($p<0.05$) than median site. **Bold values: Adjusted change value is significantly lower ($P<0.05$) than median site.**

Table 2-21: Global Assessment of Functioning (GAF; DSM-IV Axis V)

Column Heading	Source/Variable and Computation Description
	IDF 34; FDF 37.
Pre-Entry N	MHICM veterans with entry interview data on this measure.
Pre-Entry Mean	GAF score at entry (34: #284).
Follow-up Mean	Mean GAF score at follow-up (39: #116) adjusted for site, time in program, baseline value, and 11 baseline covariates.
Change at Follow-up	Least squares mean derived from analysis of covariance, including site, time in program, baseline value, and eleven other baseline covariates.
Percent Change	Change to Follow-up divided by Pre-Entry Mean to get adjusted percent change. Shaded values: Adjusted change value is significantly lower ($p<0.05$) than median site. **Bold values: Adjusted change value is significantly higher ($P<0.05$) than median site.**

Table 2-22: Instrumental Activities of Daily Living (Schizophrenia Outcomes Module items)

Column Heading	Source/Variable and Computation Description
	IDF 34; FDF 37.
Pre-Entry N	MHICM veterans with entry interview data on this measure.
Pre-Entry Mean	Mean IADL score at entry (34: # 114-125).
Follow-up Mean	Mean IADL (37: #77-88) score at follow-up adjusted for site, time in program, baseline value, and eleven other baseline covariates.
Change at Follow-up	Least squares mean derived from analysis of covariance, including site, time in program, baseline value, and eleven other baseline covariates.
Percent Change	Change to Follow-up divided by Pre-Entry Mean to get adjusted percent change. Shaded values: Adjusted change value is significantly lower ($p<0.05$) than median site. **Bold values: Adjusted change value is significantly higher ($P<0.05$) than median site.**

Table 2-23: Quality of Life (Lehman QOLI Delighted-Terrible items)

Column Heading	Source/Variable and Computation Description
	IDF 34; FDF 37.
Pre-Entry N	MHICM veterans with entry interview data on this measure.
Pre-Entry Mean	Mean QOL scores at entry (34: #23,128,136,147,150,240).
Follow-up Mean	Mean QOL scores (37: #14,91,99,110,113,201) adjusted for site, time in program, baseline value, and eleven other baseline covariates.
Change at Follow-up	Least squares mean derived from analysis of covariance, including site, time in program, baseline value, and eleven other baseline covariates.
Percent Change	Change to Follow-up divided by Pre-Entry Mean to get adjusted percent change. Shaded values: Adjusted change value is significantly lower ($p<0.05$) than median site. **Bold values: Adjusted change value is significantly higher ($P<0.05$) than median site.**

Table 2-23a: Housing Independence Index (NEPEC scale)

Column Heading	Source/Variable and Computation Description
	IDF 34; FDF 37: Days in each setting were multiplied by weight for restrictiveness.
Pre-Entry N	MHICM veterans with entry interview data on this measure.
Pre-Entry Sum	Sum of weighted HOUI items at entry (34: #138*4, 140*3, 142*2, 144*1, 146*0).
Follow-up Sum	Sum of weighted HOUI items at follow-up (37: #101*4, 103*3, 105*2, 107*1, 109*0) adjusted for site, time in program, baseline value, and eleven other baseline covariates.
Change at Follow-up	Least squares mean derived from analysis of covariance, including site, time in program, baseline value, and eleven other baseline covariates.
Percent Change	Change to Follow-up divided by Pre-Entry Mean to get adjusted percent change.
	Shaded values: Adjusted change value is significantly lower ($p<0.05$) than median site.
	Bold values: Adjusted change value is significantly higher ($P<0.05$) than median site.

Table 2-24: VA Mental Health Services Satisfaction (3 item)

Column Heading	Source/Variable and Computation Description
	IDF 34; FDF 37.
Pre-Entry N	MHICM veterans with entry interview data on VA Mental Health services satisfaction.
Pre-Entry Mean	Sum VA MH Satisfaction score at entry (34: #232,235,239).
Follow-up Mean	Sum VA MH Satisfaction score at follow-up (37: #193,196,200) adjusted for site, time in program, baseline value, and eleven other baseline covariates.
Change at Follow-up	Least squares mean derived from analysis of covariance, including site, time in program, baseline value, and eleven other baseline covariates.
Percent Change	Change to Follow-up divided by Pre-Entry Mean to get adjusted percent change.
	Shaded values: Adjusted change value is significantly lower ($p<0.05$) than median site.
	Bold values: Adjusted change value is significantly higher ($P<0.05$) than median site.

Table 2-25: Satisfaction with VA MHICM Services (vs. VA Mental Health Services; single items)

Column Heading	Source/Variable and Computation Description
	FDF 37.
Pre-Entry N	MHICM veterans with entry interview data on VA mental health services satisfaction.
Pre-Entry Mean	Mean VA MH services satisfaction score at entry (34: #228).
Follow-up Mean	Mean MHICM Satisfaction score at follow-up (37: #190) adjusted for site, time in program, baseline value, and eleven other baseline covariates.
Change at Follow-up	Least squares mean derived from analysis of covariance, including site, time in program, baseline value, and eleven other baseline covariates.
Percent Change	Change to Follow-up divided by Pre-Entry Mean to get adjusted percent change.
	Shaded values: Adjusted change value is significantly lower ($p<0.05$) than median site.
	Bold values: Adjusted change value is significantly higher ($P<0.05$) than median site.

Table 2-26: MHICM Unit Costs (per Veteran, FTE, Visit)

Column Heading	Source/Variable and Computation Description
	Source: FY 2003 Site-generated annual progress reports, OPC stop codes.
FY03 Total Expenditures	FY 2003 reported total expenditure of MHICM funds.
Total Vets	# MHICM veterans receiving MHICM services in FY 2003 (OPC).
Cost per Veteran	Annual cost per MHICM veteran (FY 03 Total Expenditures divided by Total Vets)
FY03 P/S Expenditures	FY 2003 reported personal service expenditures.
FY03 Filled FTE	MHICM positions reported filled as of September 30, 2003.
Cost per FTE	Annual cost per MHICM FTE (FY 03 P/S Expenditures divided by Total FTE)
Adj. Total Visits/Vet/Yr	Total MHICM stop code visits (per veteran), adjusted for 52 weeks.
Total Visits/Site/Yr	Adjusted Total Visits/Vet/Yr multiplied by Total Vets to get Total Team Visits for FY 2003.
Cost per Visit	Cost per visit (FY 03 Total Expenditures divided by Total Visits per Yr)

Table 2-27: Site Performance on MHICM Critical Monitors

Column Heading	Source/Variable and Computation Description
	Source: Critical monitor outliers identified on tables 2-1 to 2-24.
Structure	# of 5 critical monitors in tables 2-2 to 2-6 in undesired direction.
Patient	# of 3 critical monitors in tables 2-7 to 2-11 in undesired direction.
Process	# of 5 critical monitors in tables 2-12 to 2-17 in undesired direction.
Outcome	# of 4 critical monitors in tables 2-18 to 2-25 in undesired direction.
Site Total	Total # of 17 critical monitors in tables 2-2 to 2-25 in undesired direction.

Table 2-28: Outliers for Team Structure Monitors

Column Heading	Source/Variable and Computation Description
	Source: Outliers from Tables 2-5 and 2-6.
FTE Unfilled	Yes = one or more MHICM positions unfilled for 6 or more months (Table 2-5).
Unassigned Medical	N = physician (MD) or nurse-case manager (RN) not assigned to MHICM team (2-6).
Caseload Size	Total # MHICM veterans as of 9/30/03 divided by Clinical FTE as of 9/30/03 (2-6).
Team Size	Clinical FTE as of September 30, 2003 (Monthly FTE/Caseload Report) (2-5).
Total Team Outliers	# Team Structure monitors for which team value is an outlier (range: 0-5).
# Applicable Monitors	# Team Structure monitors that applied to team in FY 2003 (range: 0-5).
% Outliers/Applicable	# team outliers divided by # applicable monitors.

Table 2-29: Outliers for Client Characteristics Monitors

Column Heading	Source/Variable and Computation Description
	Source: Outliers from Tables 2-10 and 2-11.
% Clients GTE 30 Days	% MHICM veterans with 30+ VA hospital days in year before entry (2-10).
% Clients Psychotic Dx	% MHICM veterans with psychotic diagnosis at entry (2-10).
Mean GAF at Entry	Average GAF score at entry for veterans seen by team (2-11).
Total Team Outliers	# Client Characteristics monitors for which team value is an outlier (range: 0-3).
# Applicable Monitors	# Client Characteristics monitors that applied to team in FY 2003 (range: 0-3).
% Outliers/Applicable	# team outliers divided by # applicable monitors.

Table 2-30: Outliers for Clinical Process Monitors

Column Heading	Source/Variable and Computation Description
	Source: Outliers from Tables 2-12, 2-13, 2-14 and 2-15.
Tenure	% veterans discharged as of September 30, 2003 (2-12).
Intensity	% veterans with one hour or more of weekly contact (2-13).
Location	% veterans with 60% or more of contacts in the community (2-13).
Frequency # Adjusted	Mean face-to-face visits, adjusted for each team s amount of time in program, then divided by 52 weeks to get a visits per week value (2-14).
Team provides...Rehab	% veterans receiving rehabilitation services from MHICM team (2-15A).
Total Team Outliers	# Clinical Process monitors for which team value is an outlier (range: 0-5).
# Applicable Monitors	# Clinical Process monitors that applied to team in FY 2003 (range: 0-5).
% Outliers/Applicable	# team outliers divided by # applicable monitors.

Table 2-31: Outliers for Client Outcome Monitors

Column Heading	Source/Variable and Computation Description
	Source: Outliers from Tables 2-18a, 2-19, 2-20 and 2-23.
365 Days % Change	Mean % change in mental health days after 365 days (2-18a).
Reported Symptoms %	Change in BSI at Follow-up (2-20).
Observed Symptoms %	Change in BPRS at Follow-up (2-19).
Quality of Life %	Change in QOL at Follow-up (2-23).

Table 2-32A&B: Outliers for Minimum Standards

	Source: Selected Outliers from Tables 2-5, 2-6, 2-10, 2-12, 2-13, 2-14, and 2-15.
% Clients Psychotic Dx	% vets with psychotic diagnosis at entry *(Threshold: 50% or more)* (2-10).
% Clients GTE 30 Days	% vets with 30+ psychiatric inpatient days in year pre-entry *(50% or more)*(2-10).
# Adjusted Face-to-face	Mean adjusted face-to-face visits per week per veteran *(1.0 or more)*(2-14).
Caseload Size	Ratio of veterans to clinical FTE (mean caseload as of 9/30/01)*(7:1 to 15:1)* (2-6).
% Clients seen 60%…	% vets for whom 60+% of visits occur in community *(50% or more)* (2-13).+
Team provides...Rehab	% vets receiving psychiatric rehabilitation/skills training *(25% or more)* (2-15).
Tenure	% vets discharged from MHICM program in FY 2003 *(< 20%)* (2-12).
Team Size	# Clinical case managers on team as of 9/30/01 *(4.0+ FTEE)* (2-5).
Total Outliers	# of 8 minimum standards for which team value was an outlier (range: 0-8).
% Min Stand Outliers	% of 8 minimum standards for which team value was outlier in FY 2003.
% Outliers FY 2001	% of 8 minimum standards for which team value was outlier in FY 2001.
Change % Outliers	Change in team % outliers from FY 2001 to FY 2003.

Table 2-33 Site Outlier Review Summary

	Source: Site completed Outlier Review Forms for indicated outliers.
Site # Outliers	# of critical monitors for which team value was an outlier in undesired direction.
Reason A	# Team responses indicating "Legitimate differences in this site's team that do not conflict with national program goals".
Reason B	# Team responses indicating "Local policies at this site that may conflict with national program goals".
Reason C	# Team responses indicating "Problems in program implementation for which corrective action has been taken".
Reason D	# Team responses indicating "Problems in program implementation for which corrective action has since been planned".
Reason E	# Team responses indicating "Problems in program implementation for which corrective action has not yet been planned".
Sum of Responses	# outliers addressed in Outlier Review.

Appendix E. MHICM Case Management Services, FY 2003 (MHICM Veterans)

	Source: VA Outpatient Clinic File (Austin, TX).
MHICM Community	Visits recorded under DSS Identifier (stop code) #552, MHICM.
# Veterans	Number of veterans with at least one MHICM visit.
# Visits	Total MHICM (stop code 552) visits.
Mn Visits	Mean number of MHICM visits per veteran with at least one visit.
Low Intensity CM Visits	Visits recorded under DSS Identifier #564, General Case Management.
# Veterans	Number of veterans with at least one Low Intensity or General CM visit.
#Visits	Total Low Intensity or General CM (stop code 564) visits.
Mn Visits	Mean number of Low Intensity visits per veteran with at least one visit.
Facility Sum/Mean	Total number of veterans and overall mean of visits across all facilities.
VISN Sum/Mean	Total number of veterans and overall mean of visits across all VISNs.

Appendix F. Non-MHICM Case Management Services, FY 2003 (Non-MHICM Veterans)

	Source: VA Outpatient Clinic File (Austin, TX).
MHICM Community	Visits recorded under DSS Identifier (stop code) #552, MHICM.
Veterans (N)	Number of veterans with at least one MHICM visit.
# Visits	Total MHICM (stop code 552) visits.
Mn Visits	Mean number of MHICM visits per veteran with at least one visit.
General CM Visits	Visits recorded under DSS Identifier #564, General Case Management.
Veterans (N)	Number of veterans with at least one General/Low Intensity CM visit.
#Visits	Total General/Low Intensity (stop code 564) visits.
Mn Visits	Mean number of Low Intensity visits per veteran with at least one visit.
Facility Sum/Mean	Total number of veterans and overall mean of visits across all facilities.
VISN Sum/Mean	Total number of veterans and overall mean of visits across all VISNs.

Appendix G. MHICM Complex VERA Veterans, FY 2003

Source: Allocation Resource Center; NEPEC Monitoring Files.

MHICM Vets	Veterans registered in MHICM program during FY 2003.
Complex VERA Vets #	Veterans identified by ARC with 41 or more MHICM stop Code 552 Visits in FY 03. Note: Additional veterans may have previously qualified for complex class status in other patient classes (e.g. chronic mental illness) based on prior VA service use or retention criteria.
Complex VERA Vets %	Percentage of MHICM registered veterans identified as MHICM Complex VERA Class.

Appendix H. MHICM Program Monitor Trends, FY 1997-2003

Source: MHICM Performance Monitoring Reports, FY 1997-2003.

FY 1997, FY 2001, FY 2003 values are presented for select MHICM performance monitors, by monitoring domain, along with the percent change in values between 1997-2003.

<u>Team Structure</u>	
Teams	Total MHICM teams in FY 2003 (63 teams included in FY 2003 Report).
Clients	Total veteran clients included in FY 2003 report.
Expenditure	Total program expenditures for 63 MHICM teams in FY 2003 report.
Assigned FTEE	Total FTE assigned to 63 MHICM teams in the FY 2003 report.
Filled FTEE	Total filled FTEE for 63 MHICM teams in FY 2003 report.
% Filled	Filled FTEE divided by assigned FTE.
Staff detailed away	% of filled FTE detailed part-time to other services.
Cost/Client	Unit cost per MHICM client
Client/Staff ratio	Mean client to staff ratio (caseload size). MHICM range: 7:1 to 15:1.
<u>Client Characteristics</u>	
Age	Mean client age at entry.
Minority race / ethnicity	Percent minority race / ethnicity.
Mean hospital days yr pre	Mean hospital days per veteran in year preceding entry.
% 30+ hospital days yr pre	Percent of clients meeting minimum hospital days criterion at entry: 30+ days in prior year.
2+ yrs hospital lifetime	Percent of clients with 2 or more years of total lifetime psychiatric hospitalization.
Psychotic diagnosis	Percent clients with a primary psychiatric diagnosis with psychosis at entry.
Substance use diagnosis	Percent of clients with co-occurring substance use diagnosis at entry.
Paid employment (3yrs)	Percent of clients reporting paid employment in the three years preceding entry.
Public support income	Percent of clients receiving public support income from VA or social security at entry.
<u>MHICM Services</u>	
Contacted weekly	Percent of clients contacted weekly or more frequently.
Contacts/week	Face-to-face contacts per week adjusted for portion of year in program.
60%+ visits community	Percent of clients with 60% or more of contacts occurring in the community.
Discharged	Percent of MHICM clients discharged during FY 2003.
Client-rated Alliance	Therapeutic alliance score reported by MHICM clients at follow-up
Team ACT Fidelity Score	Mean ACT fidelity score for MHICM teams overall.
<u>Client Outcome (Follow-up)</u>	
Observed symptoms	Percent change in BPRS score from entry to follow-up.
Reported symptoms	Percent change in BSI score from entry to follow-up.
Quality of Life reported	Percent change in Quality of Life score from entry to follow-up.
Satisfaction MHICM (1-5)	Percent change in Client Satisfaction with MHICM at follow-up.
Change Inpt days (6mos.)	Change in psychiatric hospital days during first 6 months.
% Change Inpt days (6mo)	Percent change in psychiatric hospital days during first 6 months.

Appendix E
MHICM Case Management Services, FY 2003 (Registered MHICM Veterans*)

VISN	SITE NAME/VISN	MHICM Visits (Stop Code 552 Visits) #Veterans	#Visits	MnVisits	Low Intensity CM Visits (Stop Code 564 Visits) #Veterans	#Visits	MnVisits
1	BEDFORD	153	14,145	92.50	0	0	0.0
1	BROCKTON	68	2,252	33.10	0	0	0.0
1	TOGUS	25	1,448	57.90	0	0	0.0
1	WEST HAVEN	58	4,078	70.30	0	0	0.0
	VISN 1	**304**	**21,923**	**63.45**	**0**	**0**	**0.00**
2	ALBANY	45	3,750	83.3	0	0	0.0
2	BUFFALO	72	2,845	39.5	0	0	0.0
2	CANANDAIGUA	109	9,621	88.3	0	0	0.0
2	SYRACUSE	52	1,785	34.3	0	0	0.0
	VISN 2	**278**	**18,001**	**61.35**	**0**	**0**	**0.00**
3	BROOKLYN	54	1,440	26.7	0	0	0.0
3	MONTROSE	101	5,185	51.3	0	0	0.0
3	NEW JERSEY	88	3,189	36.2	1	1	1.0
3	NORTHPORT	107	6,197	57.9	1	1	1.0
	VISN 3	**350**	**16,011**	**43.03**	**2**	**2**	**1.00**
4	COATESVILLE	79	2,959	37.5	54	405	7.5
4	PITTSBURGH	128	4,599	35.9	0	0	0.0
	VISN 4	**207**	**7,558**	**36.70**	**54**	**405**	**7.50**
5	BALTIMORE	32	1,063	33.2	0	0	0.0
5	PERRY POINT	94	5,679	60.4	0	0	0.0
5	WASHINGTON,DC	24	1,709	71.2	0	0	0.0
	VISN 5	**150**	**8,451**	**54.93**	**0**	**0**	**0.00**
6	HAMPTON	61	3,661	60	1	2	2.0
6	SALEM	41	1,527	37.2	13	43	3.3
6	SALISBURY	34	1,451	42.7	9	98	10.9
	VISN 6	**136**	**6,639**	**46.63**	**23**	**143**	**6.2**
7	ATLANTA	56	4,565	81.5	0	0	0.0
7	AUGUSTA	72	4,886	67.9	0	0	0.0
7	TUSCALOOSA	68	4,757	70	0	0	0.0
7	TUSKEGEE	54	2,460	45.6	0	0	0.0
	VISN 7	**250**	**16,668**	**66.25**	**0**	**0**	**0.00**
8	GAINESVILLE	63	3,602	57.2	0	0	0.0
8	MIAMI	54	4,535	84	0	0	0.0
	VISN 8	**117**	**8,137**	**70.60**	**0**	**0**	**0.00**
10	CHILLICOTHE	62	3,701	59.7	0	0	0.0
10	CINCINNATI	62	2,859	46.1	0	0	0.0
10	CLEVELAND	140	9,404	67.2	2	7	3.5
10	COLUMBUS	25	1,437	57.5	0	0	0.0
10	DAYTON	49	2,326	47.5	0	0	0.0
10	YOUNGSTOWN	39	3,256	83.5	0	0	0.0
	VISN 10	**377**	**22,983**	**60.25**	**2**	**7**	**3.50**
11	ANN ARBOR HCS	49	3,843	78.4	0	0	0.0
11	BATTLE CREEK	78	4,116	52.8	22	35	1.6
11	DETROIT VAMC	100	3,329	33.3	0	0	0.0
11	NORTHERN INDIANA	69	4,012	58.1	1	1	1.0

VISN	SITE NAME/VISN	MHICM Visits (Stop Code 552 Visits) #Veterans	#Visits	MnVisits	Low Intensity CM Visits (Stop Code 564 Visits) #Veterans	#Visits	MnVisits
	VISN 11	**296**	**15,300**	**55.65**	**23**	**36**	**1.57**
12	CHICAGO WEST SIDE	71	4,334	61	0	0	0.0
12	MADISON	47	8,872	188.8	0	0	0.0
12	MILWAUKEE	26	2,174	83.6	0	0	0.0
12	NORTH CHICAGO	130	13,027	100.2	0	0	0.0
12	TOMAH,WI	40	5,649	141.2	0	0	0.0
	VISN 12	**314**	**34,056**	**114.96**	**0**	**0**	**0.00**
15	ST.LOUIS,MO	32	917	28.7	0	0	0.0
	VISN 15	**32**	**917**	**28.70**	**0**	**0**	**0.00**
16	GULF COAST	53	3,868	73	0	0	0.0
16	HOUSTON	63	2,846	45.2	0	0	0.0
16	LITTLE ROCK	42	2,979	70.9	33	303	9.2
16	NEW ORLEANS	50	1,516	30.3	0	0	0.0
	VISN 16	**208**	**11,209**	**54.85**	**33**	**303**	**9.18**
17	DALLAS	83	5,121	61.7	0	0	0.0
	VISN 17	**83**	**5,121**	**61.70**	**0**	**0**	**0.00**
19	DENVER	78	3,194	40.9	0	0	0.0
19	GRAND JUNCTION	41	2,993	73	0	0	0.0
19	SALT LAKE CITY	54	2,347	43.5	1	1	1.0
19	SOUTHERN COLORADO	98	4,633	47.3	1	1	1.0
	VISN19	**271**	**13,167**	**51.18**	**2**	**2**	**1.00**
20	AMERICAN LAKE	48	2,539	52.9	0	0	0.0
20	BOISE	39	864	22.2	0	0	0.0
20	PORTLAND	76	4,716	62.1	13	16	1.2
20	SEATTLE	38	2,706	71.2	0	0	0.0
	VISN 20	**201**	**10,825**	**52.10**	**13**	**16**	**1.23**
21	PALO ALTO	42	1,966	46.8	0	0	0.0
21	SAN FRANCISCO	40	2,107	52.7	0	0	0.0
	VISN 21	**82**	**4,073**	**49.75**	**0**	**0**	**0.00**
22	GREATER LOS ANGELE	46	715	15.5	0	0	0.0
	VISN 22	**46**	**715**	**15.50**	**0**	**0**	**0.00**
23	IOWA CITY,IA	42	1,167	27.8	1	4	4.0
23	KNOXVILLE	97	4,790	49.4	0	0	0.0
23	MINNEAPOLIS	68	3,555	52.3	0	0	0.0
23	OMAHA,NE	25	1,068	42.7	0	0	0.0
23	ST.CLOUD	37	1,289	34.8	2	20	10.0
	VISN 23	**269**	**11,869**	**41.40**	**3**	**24**	**8.00**
	Facility Sum	**3,971**	**233,623**	**58.83**	**155**	**938**	**6.05**
	VISN Mean	**199**	**11,681**	**54.16**	**8**	**47**	**2.06**
	Standard Deviation	**101.8**	**8040.7**	**19.4**	**14.5**	**110.5**	**3.1**
	Coefficient of Variation	**0.5**	**0.7**	**0.4**	**1.9**	**2.4**	**1.5**

* MHICM teams submitted Initial Data Forms and Follow-up monitoring data for these veterans to NEPE

Appendix F
Non-MHICM Case Management Services, FY 2003
(Non-MHICM Veterans at MHICM and Non-MHICM Sites~)

VISN	SITE CODE	SITE NAME	MHICM Visits (Stop Code 552) #Veterans	#Visits	MnVisits	General CM Visits (Stop Code 564) #Veterans	#Visits	MnVisits
1	402	TOGUS*	76	1,010	13.3	0	0	0.0
1	518	BEDFORD*	41	186	4.5	0	0	0.0
1	523A5	BROCKTON VAMC*	7	21	3.0	0	0	0.0
1	689	WEST HAVEN*	6	48	8.0	0	0	0.0
		VISN 1	**130**	**1,265**	**9.7**	**0**	**0**	**0.0**
2	528	UPSTATE N.Y. HCS BUFFALO*	25	83	3.3	0	0	0.0
2	528A5	CANANDIAGUA DIVISION*	63	2,704	42.9	0	0	0.0
2	528A7	HCS UPSTATE NY V2 SYRACUSE*	35	216	6.2	0	0	0.0
2	528A8	HCS UPSTATE NY V2 ALBANY*	105	150	1.4	0	0	0.0
		VISN 2	**228**	**3,153**	**13.8**	**0**	**0**	**0.0**
3	526	BRONX#	195	1,420	7.3	0	0	0.0
3	561	EAST ORANGE*	8	12	1.5	0	0	0.0
3	561A4	LYONS*	10	59	5.9	0	0	0.0
3	620	MONTROSE VA HUDSON HCS NY*	42	197	4.7	226	624	2.8
3	620A4	CASTLE PNT VA HUDSON HCS NY	1	25	25.0	0	0	0.0
3	620GA	NEW CITY (ROCKLAND) CBOC	0	0	0.0	99	343	3.5
3	630GC	BROOKLYN CBOC	6	16	2.7	0	0	0.0
3	632	NORTHPORT*	36	205	5.7	6	150	25.0
		VISN 3	**298**	**1,934**	**6.5**	**331**	**1,117**	**3.4**
4	542	COATESVILLE*	52	559	10.8	239	4,137	17.3
4	595	LEBANON	1	1	1.0	2	22	11.0
4	646A5	PITTSBURGH-HIGHLAND DR*	24	137	5.7	0	0	0.0
4	693	WILKES BARRE	11	44	4.0	0	0	0.0
		VISN 4	**88**	**741**	**8.4**	**241**	**4,159**	**17.3**
5	512	BALTIMORE*	13	103	7.9	0	0	0.0
5	512A5	PERRY POINT*	55	324	5.9	0	0	0.0
5	613	MARTINSBURG	13	65	5.0	0	0	0.0
5	688	WASHINGTON DC*	65	150	2.3	1	4	4.0
		VISN 5	**146**	**642**	**4.4**	**1**	**4**	**4.0**
6	558	DURHAM	0	0	0.0	30	249	8.3
6	565	FAYETTEVILLE NC*	29	1,270	43.8	0	0	0.0
6	590	HAMPTON*	34	230	6.8	1	1	1.0
6	658	SALEM*	13	21	1.6	166	478	2.9
6	659	SALISBURY*	13	153	11.8	91	479	5.3
6	659GA	CHARLOTTE CBOC	2	2	1.0	142	1,118	7.9
		VISN 6	**91**	**1,676**	**18.4**	**430**	**2,325**	**5.4**
7	508	ATLANTA*	43	164	3.8	0	0	0.0
7	509A0	LENWOOD	20	20	1.0	0	0	0.0
7	521	BIRMINGHAM^	30	174	5.8	0	0	0.0
7	544	COLUMBIA SC^	69	387	5.6	0	0	0.0
7	619	MONTGOMERY	3	15	5.0	0	0	0.0
7	619A4	TUSKEGEE*	59	911	15.4	0	0	0.0
7	679	TUSCALOOSA*	65	226	3.5	0	0	0.0
		VISN 7	**289**	**1,897**	**6.6**	**0**	**0**	**0.0**
8	546	MIAMI*	25	43	1.7	0	0	0.0
8	548	W PALM BEACH^	0	0	0.0	71	261	3.7
8	573	N FL/S GA HCS*	34	121	3.6	0	0	0.0
8	672	SAN JUAN PR	0	0	0.0	32	37	1.2
8	673	TAMPA*	117	2,062	17.6	0	0	0.0

Appendix F
Non-MHICM Case Management Services, FY 2003
(Non-MHICM Veterans at MHICM and Non-MHICM Sites~)

VISN	SITE CODE	SITE NAME	MHICM Visits (Stop Code 552) #Veterans	#Visits	MnVisits	General CM Visits (Stop Code 564) #Veterans	#Visits	MnVisits
8	673BY	ORLANDO-SOC	56	497	8.9	0	0	0.0
		VISN 8	**232**	**2,723**	**11.7**	**103**	**298**	**2.9**
9	621	MOUNTAIN HOME*	156	1,880	12.1	0	0	0.0
		VISN 9	**156**	**1,880**	**12.1**	**0**	**0**	**0.0**
10	538	CHILLICOTHE*	11	247	22.5	11	361	32.8
10	539	CINCINNATI*	38	60	1.6	0	0	0.0
10	541A0	CLEVELAND-BRECKSVILLE*	46	250	5.4	4	52	13.0
10	541BZ	YOUNGSTOWN*	2	2	1.0	0	0	0.0
10	541GB	LORAIN CBOC^	4	9	2.3	0	0	0.0
10	541GD	MANSFIELD CBOC^	0	0	0.0	57	1,317	23.1
10	541GF	PINESVILLE CBOC PH	2	2	1.0	0	0	0.0
10	541GI	WARREN CBOC CLEVELAND OH^	7	100	14.3	0	0	0.0
10	552	DAYTON*	20	987	49.4	0	0	0.0
10	757	COLUMBUS-IOC*	19	33	1.7	0	0	0.0
10	757GB	GROVE CITY CBOC OH	4	61	15.3	0	0	0.0
		VISN 10	**153**	**1,751**	**11.4**	**72**	**1,730**	**24.0**
11	506	ANN ARBOR HCS*	3	51	17.0	0	0	0.0
11	515	BATTLE CREEK*	44	128	2.9	40	42	1.1
11	550	VA ILLIANA HCS DANVILLE IL	0	0	0.0	21	2,842	135.3
11	553	DETROIT VAMC*	11	60	5.5	0	0	0.0
11	610	NORTHERN INDIANA HCS*	13	170	13.1	9	247	27.4
11	610A4	NORTHERN IN HCS	0	0	0.0	44	1,466	33.3
		VISN 11	**71**	**409**	**5.8**	**114**	**4,597**	**40.3**
12	537	VA CHICAGO HCS*	82	176	2.1	0	0	0.0
12	556	NORTH CHICAGO*	26	161	6.2	0	0	0.0
12	556GD	KENOSHA CBOC WI	1	1	1.0	0	0	0.0
12	578	HINES	5	5	1.0	0	0	0.0
12	607	MADISON*	10	70	7.0	0	0	0.0
12	676	TOMAH*	14	179	12.8	0	0	0.0
12	695	MILWAUKEE*	5	125	25.0	0	0	0.0
		VISN 12	**143**	**717**	**5.0**	**0**	**0**	**0.0**
15	589A4	TRUMAN VH COLUMBIA MO	26	135	5.2	0	0	0.0
15	589A5	COLMERY-ONEIL VAMC HCS KS*	176	14,751	83.8	47	467	9.9
15	657A0	ST LOUIS-Jeff Bks.	10	12	1.2	0	0	0.0
		VISN 15	**212**	**14,898**	**70.3**	**47**	**467**	**9.9**
16	520A0	GULFPORT*	14	48	3.4	0	0	0.0
16	580	HOUSTON*	10	27	2.7	0	0	0.0
16	598A0	N. LITTLE ROCK*	27	345	12.8	639	4,597	7.2
16	629	NEW ORLEANS*	8	28	3.5	0	0	0.0
		VISN 16	**59**	**448**	**7.6**	**639**	**4,597**	**7.2**
17	549	DALLAS*	13	14	1.1	0	0	0.0
17	671	SAN ANTONIO^	10	292	29.2	0	0	0.0
17	674A4	WACO*	80	4,187	52.3	0	0	0.0
		VISN 17	**103**	**4,493**	**44**	**0**	**0**	**0.0**
18	501	NEW MEXICO HCS*	45	1,707	37.9	0	0	0.0
18	644	PHOENIX*	154	2,251	14.6	154	384	2.5
		VISN 18	**199**	**3,958**	**19.9**	**154**	**384**	**2.5**
19	554	DENVER*	20	565	28.3	7	83	11.9
19	554GD	PUEBLO CBOC CO	1	2	2.0	0	0	0.0

Appendix F
Non-MHICM Case Management Services, FY 2003
(Non-MHICM Veterans at MHICM and Non-MHICM Sites~)

VISN	SITE CODE	SITE NAME	MHICM Visits (Stop Code 552) #Veterans	MHICM Visits (Stop Code 552) #Visits	MHICM Visits (Stop Code 552) MnVisits	General CM Visits (Stop Code 564) #Veterans	General CM Visits (Stop Code 564) #Visits	General CM Visits (Stop Code 564) MnVisits
19	554GE	COLORADO SPGS CBOC CO	13	49	3.8	0	0	0.0
19	554GG	LA JUNTA CBOC CO	4	4	1.0	0	0	0.0
19	575	GRAND JUNCTION*	23	236	10.3	0	0	0.0
19	660	SALT LAKE CITY HTHCARE*	47	515	11.0	4	15	3.8
19	666	SHERIDAN^	28	676	24.1	0	0	0.0
		VISN 19	**136**	**2,047**	**15.1**	**11**	**98**	**8.9**
20	531	BOISE*	2	2	1.0	0	0	0.0
20	648	PORTLAND*	28	414	14.8	26	312	12.0
20	653	ROSEBURG	10	67	6.7	0	0	0.0
20	663	PUGET SOUND HCS*	14	106	7.6	0	0	0.0
20	663A4	AMERICAN LAKE*	14	127	9.1	0	0	0.0
20	668	SPOKANE WA#	17	698	41.1	97	1,680	17.3
		VISN 20	**85**	**1,414**	**16.6**	**123**	**1,992**	**16.2**
21	640A0	PALO ALTO-MENLO PK	5	11	2.2	0	0	0.0
21	640BY	SAN JOSE	6	9	1.5	0	0	0.0
21	662BU	VA COMPREHEN HMLS CTR	3	37	12.3	0	0	0.0
		VISN 21	**14**	**57**	**4.1**	**0**	**0**	**0.0**
22	593	VA SOUTHERN NEVADA HCS	0	0	0.0	100	1,085	10.9
22	600GC	LONG BEACH CBOC	0	0	0.0	177	220	1.2
22	605	LOMA LINDA	13	13	1.0	0	0	0.0
22	664	VA SAN DIEGO HCS CA^	23	384	16.7	0	0	0.0
22	691	GREATER LA HCS*	21	30	1.4	0	0	0.0
		VISN 22	**57**	**427**	**7.5**	**277**	**1,305**	**4.7**
23	437	FARGO	0	0	0.0	89	536	6.0
23	438	SIOUX FALLS	0	0	0.0	90	315	3.5
23	618	MINNEAPOLIS*	5	168	33.6	0	0	0.0
23	636	VA NEB-WESTERN IA HCS*	1	13	13.0	0	0	0.0
23	636A6	VA CPHN DES MOINES IA*	3	115	38.3	0	0	0.0
23	636A7	VA CPHN KNOXVILLE IA*	5	27	5.4	47	82	1.7
23	636A8	VA CPHN IOWA CITY IA*	6	15	2.5	0	0	0.0
23	656	ST CLOUD*	2	7	3.5	28	344	12.3
		VISN 23	**22**	**345**	**15.7**	**254**	**1,277**	**5.0**
		ALL SUM/MEAN	**2,912**	**46,875**	**16.1**	**2,797**	**24,350**	**8.7**
		VISN Mean	**139**	**2,232**	**14.9**	**133**	**1,160**	**7.0**
		Standard Deviation	**37.5**	**1,584.4**	**13.8**	**117.6**	**1,098.7**	**23.3**
		Coefficient of Variation	**0.3**	**0.7**	**0.9**	**0.9**	**0.9**	**3.3**

~ Non-MHICM veterans were identified through VHA Automated databases in Austin, Texas.

* MHICM team operational during in FY 2003. # MHICM team not operational in FY 2003.

^ MHICM team in development during FY 2003.

Appendix G
MHICM Complex VERA Veterans, FY 2003

This table presents numbers and proportions of veterans added to the Complex Care VERA reimbursement class due to participation in MHICM. To attain this reimbursement status, veterans must be registered in MHICM and receive 41 or more MHICM clinic stops (visits) during the fiscal year. These criteria are monitored by VHA's Allocation Resource Center (ARC) and Northeast Program Evaluation Center (NEPEC). For FY 2003, VERA reimbursement for a veteran in the VERA MHICM Complex Care Patient Class was set at $39,463 per year.

VISN	Site Code	Site Name	MHICM Veterans FY 2003 #	MHICM Complex VERA Veterans #	MHICM Complex VERA Veterans %
1	518	Bedford	154	104	67.5%
1	523A5	Brockton	69	25	36.2%
1	402	Togus	25	15	60.0%
1	689	West Haven	59	40	67.8%
		VISN 1	**307**	**184**	**59.9%**
2	528A8	Albany	46	26	56.5%
2	528	Buffalo	74	26	35.1%
2	528A5	Canandaigua	117	81	69.2%
2	528A7	Syracuse	52	14	26.9%
		VISN 2	**289**	**147**	**50.9%**
3	630A4	Brooklyn	57	10	17.5%
3	620	Montrose	111	76	68.5%
3	561A4	New Jersey	90	27	30.0%
3	632	Northport	114	70	61.4%
		VISN 3	**372**	**183**	**49.2%**
4	542	Coatesville	83	25	30.1%
4	646A5	Pittsburgh	129	50	38.8%
		VISN 4	**212**	**75**	**35.4%**
5	512	Baltimore	34	9	26.5%
5	512A5	Perry Point	97	68	70.1%
5	688	Washington, DC	24	14	58.3%
		VISN 5	**155**	**91**	**58.7%**
6	590	Hampton	64	37	57.8%
6	658	Salem	42	19	45.2%
6	659	Salisbury	35	13	37.1%
		VISN 6	**141**	**69**	**48.9%**
7	508	Atlanta	57	46	80.7%
7	509	Augusta	77	44	57.1%
7	679	Tuscaloosa	70	46	65.7%
7	619A4	Tuskegee	66	30	45.5%
		VISN 7	**270**	**166**	**61.5%**
8	573	Gainesville	63	35	55.6%
8	546	Miami	54	46	85.2%
		VISN 8	**117**	**81**	**69.2%**
10	538	Chillicothe	62	39	62.9%
10	539	Cincinnati	62	50	80.6%
10	541	Cleveland	141	94	66.7%
10	757	Columbus	25	16	64.0%
10	552	Dayton	51	39	76.5%
10	541B2	Youngstown	41	29	70.7%
		VISN 10	**382**	**267**	**69.9%**
11	506	Ann Arbor	49	23	46.9%
11	515	Battle Creek	78	49	62.8%
11	553	Detroit	103	25	24.3%
11	610	Northern Indiana	73	31	42.5%
		VISN 11	**303**	**128**	**42.2%**

VISN	Site Code	Site Name	MHICM Veterans FY 2003 #	MHICM Complex VERA Veterans #	MHICM Complex VERA Veterans %
12	537	Chicago West Side	73	46	63.0%
12	607	Madison	47	43	91.5%
12	695	Milwaukee	26	20	76.9%
12	556	North Chicago	132	88	66.7%
12	676	Tomah	41	30	73.2%
		VISN 12	**319**	**227**	**71.2%**
15	657	ST. Louis	32	11	34.4%
		VISN 15	**32**	**11**	**34.4%**
16	520	Gulf Coast	57	27	47.4%
16	580	Houston	65	47	72.3%
16	598	Little Rock	45	31	68.9%
16	629	New Orleans	52	15	28.8%
		VISN 16	**219**	**120**	**54.8%**
17	549	Dallas	86	56	65.1%
		VISN 17	**86**	**56**	**65.1%**
19	554	Denver	80	34	42.5%
19	575	Grand Junction	42	32	76.2%
19	660	Salt Lake City	58	28	48.3%
19	567	Southern Colorado	106	46	43.4%
		VISN 19	**286**	**140**	**49.0%**
20	663A4	American Lake	48	35	72.9%
20	531	Boise	40	3	7.5%
20	648	Portland	76	55	72.4%
20	663	Seattle	39	22	56.4%
		VISN 20	**203**	**115**	**56.7%**
21	640	Palo Alto	42	26	61.9%
21	662	San Francisco	43	27	62.8%
		VISN 21	**85**	**53**	**62.4%**
22	691	Greater Los Angeles	49	1	2.0%
		VISN 22	**49**	**1**	**2.0%**
23	636A8	Iowa City	48	6	12.5%
23	636A7	Knoxville	100	67	67.0%
23	618	Minneapolis	70	48	68.6%
23	636	Omaha	25	13	52.0%
23	656	St. Cloud	38	14	36.8%
		VISN 23	**281**	**148**	**52.7%**
		ALL SUM/MEAN	**4,108**	**2,262**	**55.1%**
		VISN Mean	**196**	**108**	**52.3%**
		Standard Deviation	**105.3**	**67.6**	**15.7%**
		Coefficient of Variation	**0.5**	**0.6**	**0.3**

^MHICM veterans with 41 or more MHICM visits (Clinic Stop 552) during FY 2003.

Source: Allocation Resource Center; NEPEC Monitoring files.

Appendix H
MHICM Program Monitor Trends, FY 1997-2003

Team Structure	1997	2001	2002	2003	% change 2003-1997
Teams*	40	55	72	74	85%
Clients^	2,021	3,189	3,566	4,108	103%
Expenditures	$12.7M	$18.4M	$20.0M	$26.7M	110%
Assigned FTEE	246	289	315	393	60%
Filled FTEE	221	251	283	356	61%
% Filled	90%	87%	90%	91%	1%
Teams with 4.0 Clinical FTE	53%	46%	46%	54%	3%
Staff detailed away PT (sites)	8%	25%	21%	30%	278%
Cost/Client	$6,049	$5,777	$5,607	$6,509	8%
Client/Staff ratio	12.3	13.2	12.9	12.3	0%

Client Characteristics (Entry)	1997	2001	2002	2003	% change 2003-1997
Age	49.2	49.8	49.9	50.2	2%
Minority race / ethnicity	29.1%	32.1%	32.4%	33.9%	16%
Mean hospital days in year pre	135.4	99.9	92.3	87.9	-35%
30+ Hospital days in year pre	91.3%	78.6%	76.9%	76.6%	-16%
2+ yrs Hospitalized in lifetime	57.9%	56.9%	48.2%	46.8%	-19%
Psychotic diagnosis	87.0%	90.7%	90.7%	90.2%	4%
Substance use diagnosis	25%	20%	20%	20.8%	-17%
Paid employment (3yrs pre)	12.5%	11.3	11.5%	11.4%	-9%
Public support income	90.6%	94.1%	94.8%	94.2%	4%

MHICM Services	1997	2001	2002	2003	% change 2003-1997
Contacted weekly	85%	81%	87%	87%	3%
Contacts/week	1.6	1.3	1.4	1.4	-16%
60% + contacts in community	78%	84%	88%	89%	14%
Discharged	16%	14%	13%	14%	-14%
Client-rated Alliance	31.4	39.2	39.4	39.6	26%
Team ACT Fidelity Score	4.0	3.8	4.0	4.0	0%

Client Outcome (Follow-up)	1997	2001	2002	2003	% change 2003-1997
BPRS Observed symptoms	-7%	-10%	-10%	-13%	83%
BSI Reported symptoms	-6%	-10%	-11%	-13%	113%
Quality of Life reported	8%	10%	10%	10%	22%
Satisfaction w/ MHICM (1-5)	3.7	3.7	3.7	3.7	1%
Change Inpatient days (6mos.)	-50	-42	-35	-33	-33%
% Change Inpatient days (6mos.)	-64%	-73%	-72%	-72%	13%

* 63 of 74 teams in operation had sufficient data to be included in the FY 2003 report. Remaining values for this table reflect those sites.

End of MHICM 7th National Performance Monitoring Report - FY 2003